# Whistling Vivaldi

## ℹ INTRODUCTION

### BRIEF BIOGRAPHY OF CLAUDE STEELE

Steele was born in Illinois, just outside of Chicago, to a social worker and a truck driver. As he grew up, he became interested in the flourishing civil rights movement, and marched alongside other activists. He earned a degree in psychology from Hiram College in 1967, and later earned an M.A. in social psychology and a Ph.D. in statistically psychology from Ohio State University. Steele taught at Stanford for nearly twenty years, and later became the provost of U.C. Berkeley. However, Steele stepped down from his position in 2016. While Steele claimed to be leaving to spend more time with his family, it was widely suggested that he resigned after widespread criticism of his handling of sexual harassment cases. Steele's first book was *Whistling Vivaldi* (2010); since then, he's written numerous articles on stereotyping and discrimination in schools and the workplace.

### HISTORICAL CONTEXT

Steele references many important events in American history, particularly the history of race and civil rights in America. He describes growing up in Chicago in the 1950s, at a time when many public places were segregated by race, with the result that black people had to attend different facilities than white people. Steele concludes his book by describing the election of Barack Obama in 2008, making him the first black president of America.

### RELATED LITERARY WORKS

*Whistling Vivaldi* studies much of the same psychological research as Malcolm Gladwell's book *The Tipping Point* (2000). Like Steele, Gladwell writes about the large impact that small, seemingly insignificant environmental cues can have on human behavior. Steele also mentions the life of Anatole Broyard, a long-time *New York Times* contributor who was posthumously revealed to have been African American. Broyard's life is often taken as the inspiration for Philip Roth's book *The Human Stain* (2000), about a black college professor who hides his race (though Roth himself has denied any connection between his novel and Broyard's life).

### KEY FACTS

- **Full Title:** Whistling Vivaldi and Other Clues to How Stereotypes Affect Us
- **When Written:** 2009-2010

- **Where Written:** Palo Alto, California, USA
- **When Published:** April 2011
- **Literary Period:** Contemporary nonfiction
- **Genre:** Nonfiction, social psychology
- **Setting:** Most of the experiments described in the book were conducted either at the University of Michigan or Stanford University in the 1980s and 1990s.
- **Antagonist:** Stereotyping / identity threats
- **Point of View:** First person (Claude Steele)

### EXTRA CREDIT

**Dynamic duo.** Steele's twin brother Shelby Steele is also an acclaimed writer and academic, who won the National Book Critics Circle Award for his book *the Content of Our Character*.

**Honorary as can be.** Steele has received honorary doctorates from some of the most prestigious universities in the country, including the University of Chicago, Yale University, and Princeton University.

## 📖 PLOT SUMMARY

In *Whistling Vivaldi*, Claude Steele describes the powerful role that stereotypes play in human behavior. He begins by recalling his childhood in 1950s Chicago, and the day when he first truly became aware that he was black. Steele tried to get into a public **swimming pool**, but was told that the pool was only open to white people that day. It's significant, Steele argues, that he first became aware of his own race while being treated negatively—being turned away from a swimming pool on a hot day. Human beings judge one another according to their identities—not just their race but their class, their age, their health, etc. For more than twenty years, Steele has conducted psychological research suggesting that the mere *threat* of a stereotype is so powerful that it can change human behavior.

Steele began researching the impact of stereotypes on behavior in the 1980s, when he was beginning his career as a professor at the University of Michigan. At the time, Steele became aware of a large "achievement gap" between white and black students at the university. Black students generally underperformed on tests, and also associated primarily with other black students. They often felt that their white professors and classmates were treating them condescendingly, or accidentally making offensive remarks.

Working with another University of Michigan researcher, Steele designed a set of experiments to measure the influence of stereotypes on students' behavior. At the time, there were

many academics who were willing to entertain the possibility that certain groups of people were simply mentally inferior to other groups, for genetic reasons. Steele, along with another professor, Steven Spencer, wanted to test this possibility, even though they didn't take it seriously, and in fact despised it. Spencer and Steele hypothesized that just the *threat* of conforming to a stereotype could distract minority students, leading to poor performance on an exam. They found that when women were instructed to take a math test that claimed to measure intellectual capability, they performed well below men. However, when they were told that the test hadn't been shown to reveal any gender differences, women performed at the same level as men. Steele interpreted this finding to mean that the threat of conforming to a stereotype—i.e., being bad at math—was enough to cause the female subjects anxiety and impede their cognitive abilities. However, Steel recognized that more research was needed.

Over the next few years, Steele and his colleagues developed other experiments, suggesting that the threat of a stereotype was an important factor in reducing the performance of many different groups, not just women. Black students underperformed on experimental tests, but only when they were told that they'd be taking a test designed to measure cognitive ability (presumably because this was enough to trigger a fear of conforming to the stereotype that black students are intellectually inferior to white students). Other social psychologists produced similar results for working-class people, Asian-Americans, the elderly, the other heavily stereotyped groups. After Steele moved from Michigan to Stanford, he and some of his students created an experiment measuring the stereotype threat on inner-city high school students. They concluded that stereotype threats were particular impactful for the *most* motivated, intelligent test-takers subject to that stereotype.

Steele was slowly painting a picture of stereotyping very different from the one found in most psychological literature at the time. Many social psychologists had argued that the constant "weight" of stereotyping made minorities less motivated or self-confident in general. Steele, on the other hand, argued that stereotype threats manifested themselves in highly specific environmental cues, which could be measured and, in theory, canceled out with other environmental cues. Around the same time, other social psychologists were conducting research suggesting that human beings have an innate need to divide one another into groups, and favor members of their own group over others. Steele and his colleagues conducted further experiments suggesting that the threat of a stereotype for a group of test takers—even if the test takers hadn't previously considered the stereotype at all—could impair the test takers' performance in measurable ways.

In the second half of the book, Steele details some of the ways

that teachers and policymakers might curb the influence of stereotypes. Studies have found that minority students often push themselves too hard, and are less likely to collaborate with their peers. If outreach programs could help minority students work with one another and accept constructive feedback from their professors and mentors, then gifted minority students might not suffer from "over-effort."

Steele and some of his colleagues also wanted to understand the physiological impact of stereotyping. They ran experiments that suggested that the threat of a stereotype could cause elevated heart rate and blood pressure—even if the victim of stereotyping wasn't aware of any change. To cancel out some of the physiological effects of stereotyping, Steele researched self-affirmation theory. According to this theory, minorities can partly overcome the influence of many stereotype threats by focusing on their values and hard work, and consciously accepting that stereotypes are a part of their reality. Studies of academic performance in public schools suggest that even a simple, fifteen-minute affirmation exercise has a profound positive impact on minority students' grades.

Steele isn't suggesting that policymakers should focus on self-affirmation exercises at the expense of fighting structural inequalities in American society. Rather, he argues that the achievement gap isn't only the result of these concrete inequalities, but also the result of psychological difficulties that can be controlled and minimized fairly easily. Steele makes an analogy: even if doctors can't fight all of the genetic and behavioral factors that lead to heart disease, they can still fight the most immediate symptoms of heart disease (clogged arteries). By the same logic, teachers may not be able to correct for centuries of racism or sexism, but they can take simple steps to ensure that their students are partly shielded from the influence of stereotyping.

Steele ends by discussing the election of Barack Obama in 2008. Some suggested that Obama's election heralded the beginning of a "post-racial America," but Steele offers a slightly different conclusion. Americans shouldn't deny their racial heritage, or pretend that identity doesn't play a major role in their day-to-day lives. But perhaps they should also understand that, just as their own identities have shaped their experiences, other people's identities also shape *their* experiences. If Americans learn to understand and accept other people's differences, and realize that stereotypes affect everyone in some way, then in the long run, they may be able to defeat the achievement gap.

## 👥 CHARACTERS

### MAJOR CHARACTERS

**Claude Steele** – Claude Steele is the author and narrator of *Whistling Vivaldi*. Throughout the book, he describes the

research he's done on stereotyping, and the surprising, sometime counterintuitive conclusions he's drawn about human nature and human behavior. Steele includes many details about his life experiences, beginning with the true realization of his own blackness, as a young child in the 1950s, when he was banned from a **swimming pool** in Chicago. Steele later teaches at the University of Michigan and Stanford University, the latter of which provides him with subjects for many of his most groundbreaking experiments. Because *Whistling Vivaldi* is a nonfiction work of social psychology, Steele's first priority is explaining that social psychology to the reader. Even so, readers also learn a lot about his life and his personality: he's clearly a confident, driven person, who finds the psychology of stereotyping fascinating, in no small part because it's played such a pivotal role in his own life.

## MINOR CHARACTERS

**Steven Spencer** – Professor and researcher at the University of Michigan, who collaborates with Claude Steele on many of Steele's most important experiments measuring the impact of identity threats on cognitive performance.

**Richard Nisbett** – Social psychologist from the University of Michigan, who collaborates with Claude Steele in the late 1980s to study the achievement gap between white and black SAT takers.

**Joshua Aronson** – Stanford-based social psychologist who collaborates with Claude Steele in the early 1990s to study the influence of stigma pressure on test takers and, later, the ways that affirmation can cancel out stigma pressure.

**Joseph Brown** – Stanford student who helps organize an experiment measuring the impact of stigma pressure on inner-city Los Angeles high school students.

**Mikel Jollet** – Stanford student who helps organize an experiment measuring the impact of stigma pressure on inner-city Los Angeles high school students.

**Henry Louis Gates** – Harvard professor of history and literature who helped organize the "Issues of Our Time" book series, in which Claude Steele's *Whistling Vivaldi* is one installment.

**Amin Maalouf** – French essayist who argued that negative stereotypes are almost always more powerful and memorable than positive stereotypes, prefiguring Claude Steele's research.

**Henri Tajfel** – Social psychologist whose research provided evidence of the existence of a "minimal group effect."

**Jean-Claude Croizet** – French psychologist who runs experiments suggesting the influence of class stereotypes on French test takers.

**Philip Uri Treisman** – Mathematician and social theorist who organizes workshops designed to help minorities succeed in math classes by overcoming their stereotypes.

**Carol Porter** – Princeton-based social psychologist who studies different racial groups' study habits.

**David Nussbaum** – Stanford graduate student who, along with Claude Steele, studies the phenomenon of "over-effort" for different racial groups.

**Arthur Aron** – Social psychologist who, with Donald Dutton, studies the ways that people confuse emotions.

**Donald Dutton** – Social psychologist who, with Arthur Aron, studies the ways that people confuse emotions.

**Valerie Purdie-Vaughns** – Social psychologist who, along with Claude Steele, develops an experiment to measure the influence of gender stereotypes on test-taking habits.

**Mary Murphy** – Social psychologist who, along with Claude Steele, develops an experiment to measure the influence of gender stereotypes on test-taking habits.

**Paul Davies** – Social psychologist who, along with Claude Steele, develops an experiment to measure the influence of gender stereotypes on test-taking habits, and later develops another experiment to measure the influence of racial stereotypes on conversation habits.

**James Gross** – Emotional psychologist who collaborates with Claude Steele on an experiment to measure the physiological influence of stereotyping.

**Bill Bowen** – President of the Andrew Mellon Foundation who, during the 1980s, organized a series of groundbreaking experiments about race and education.

**Stephen Cole** – Sociologist who, with Elinor Barber, ran experiments measuring the influence of identity on college performance.

**Elinor Barber** – Sociologist who, with Stephen Cole, ran experiments measuring the influence of identity on college performance.

**Thomas Ostrom** – Claude Steele's graduate school adviser and a model for the rigorous yet encouraging feedback that Steele recommends for minority students.

**Greg Walton** – Social psychologist and professor who develops forms of "narrative intervention" designed to overcome stereotype threats.

**Carrie Fried** – Social psychologist who helps design an experiment measuring the effectiveness of narrative intervention strategies.

**Catherine Good** – Social psychologist who collaborates with Claude Steele on a series of experiments measuring the effectiveness of self-affirming narratives.

**Julio Garcia** – Social psychologist who collaborates with Claude Steele on a series of experiments measuring the effectiveness of self-affirming narratives.

**Philip Goff** – One of Claude Steele's graduate students, who

collaborates with Steele on a series of experiments measuring the influence of stereotypes on conversation, and the various ways of diluting the influence of these stereotypes.

**Geoffrey Cohen** – Graduate student who designs an experiment to measure the effectiveness of different feedback styles for minority students.

**Glenn Loury** – Sociologist who studies the importance of networking.

**Sherman James** – Epidemiologist who studies the connection between hypertension and stereotyping.

**Sheryll Cashin** – Writer who points out that, on many airplane flights, nobody seems to want to sit next to black passengers.

**Jane Elliott** – Schoolteacher who, in the late 1960s, organized a famous and infamous experiment in which she organized her children based on their eye color, in order to teach them about stereotyping.

**David Brooks** – Journalist who writes about the self-segregation of contemporary American society.

**Brent Staples** – A *New York Times* columnist who describes the hostility with which he was met as a black man in Chicago. Staples found that white people seemed to be frightened of him—in no small part because of the stereotype that black men are dangerous and violent.

**Antonio Vivaldi** – Italian Baroque composer whose music, according to *Whistling Vivaldi*, is a signifier of sophistication and civility, especially for educated white people.

**Barack Obama** – 43rd President of the United States, and the nation's first black president, whose election was widely—and wrongly, Claude Steele argues—interpreted to signal the beginning of a "post-racial America."

**Jackie Robinson** – First African American baseball player to break the "color barrier" in American professional baseball.

**Larry Summers** – Former U.S. treasury secretary and president of Harvard, who resigned from Harvard in part because of the controversy surrounding his remarks about the possibility that women do worse than men on math tests because they're genetically predisposed to be worse at math than men.

**Anatole Broyard** – Famous writer and critic who was revealed, after his death in the early 1990s, to be African American and "passing" as white.

**Ted McDougal** – White student who attends a class on African American political science, composed mainly of black students, and feels out of place and intimidated. Steele frequently invokes Ted's situation as an example of how people of all backgrounds feel the influence of stereotypes.

**John Henry Martin** – African American victim of hypertension, interviewed by Claude Steele.

**Justice Sandra Day O'Connor** – Former Supreme Court justice who was the first—and, briefly, the only—woman on the court.

**Justice Ruth Bader Ginsburg** – As of July 2017, a current Supreme Court justice. Ginsburg served alongside Justice Sandra Day O'Connor for many years.

## ◯◯ THEMES

In LitCharts literature guides, each theme gets its own color-coded icon. These icons make it easy to track where the themes occur most prominently throughout the work. If you don't have a color printer, you can still use the icons to track themes in black and white.

### 👤 IDENTITY, STEREOTYPING, AND IDENTITY THREATS

The central theme of *Whistling Vivaldi* is identity, and, furthermore, the different ways people respond to each other's identities. During his decades of research into social psychology, Claude Steele has studied many different forms of identity, including, race, gender, ethnicity, social orientation, class, and age. One of the premises of his research is that human beings will inevitably judge each other on the basis of their identity. Furthermore, Steele argues that every unique identity has a related stereotype—a kind of short-hand for perceiving how people with that identity will behave. Stereotyping is, of course, a common form of bigotry. For example, a math professor who assumes that a female student isn't going to be able to understand the material is using a sexist stereotype—that women aren't good at math—to judge the student's behavior. Steele shows how stereotyping, and the threat of *being* stereotyped, can exert a huge influence on different people's behavior.

Arguably Steele's most important insight about stereotyping is that the awareness of stereotypes (and particularly the fear of being stereotyped) can be more powerful than an explicit case of stereotyping. Much of Steele's research is centered around the fear of being stereotyped—or, put another way, of living up to a stereotype, particularly in a university setting. For example, Steele and his colleagues organized experiments in which black and white Stanford students were asked to take a difficult test. Half of the students were told that the exam measured intelligence, while the other half were told that the exam was a diagnostic test, and that black and white students did equally well on it. Steele found that black students who'd been told that the exam measured intelligence did worse than white students who'd received the same information. However, black students who'd been told the exam *didn't* measure intelligence performed at the same level as their white counterparts. Steele interprets his experiments to suggest that black students' fear of confirming a stereotype—namely, that black people are less intelligent than white people—acted as an obstacle to their

success on the test. The extra stress and anxiety of thinking about the stereotype distracted them, and resulted in lower average test scores. The peculiar thing about Steele's research is that his subjects weren't responding to any overt display of racism—simply the announcement that their test measured intelligence was enough to trigger a "stereotype threat."

Steele's findings have been replicated among many different identity groups, including women, Asian Americans, and the elderly. Other studies have found physiological evidence for the stereotype threat, including higher blood pressure and an elevated heart rate. Perhaps most surprisingly, Steele's experiments suggest that identity groups may experience a stereotype threat even if they haven't previously experienced that stereotype threat in their life. For example, studies suggest that white students will underperform on an exam if they're informed that Asian Americans generally do better on the exam—even if the white students haven't ever devoted a lot of time to thinking about the stereotype that Asian Americans are good at math. In short, Steele's research suggests that the fear of confirming a stereotype exerts a powerful, measurable influence on people's behavior—and, furthermore, that this fear can be curbed or provoked through a variety of environmental factors.

It's not surprising that Steele's findings have faced a lot of criticism, both from laypeople and other social psychologists. As Steele himself acknowledges, some social psychologists continue to deny that stereotype threats really exert such a powerful influence on people. However, this is slowly changing, as Steele's findings are replicated in an ever-growing number of settings. Others have argued that, even if Steele is *correct* about stereotype threats, he's wrong to emphasize their importance. While the perceived threat of a stereotype does seem to have a measurable influence on students' performances on exams, real, explicit displays of racism and bigotry play a much bigger role in American society overall. Put another way, Steele focuses his research on minor, specialized, "ivory tower" cases in which there's no explicitly bigoted actor—whereas, in America overall, it's more common to see inequality on a structural, systemic level, or people engaging in unambiguously bigoted behavior. In response to these criticisms, Steele argues that stereotype threats aren't minor at all. A young student's academic performance is a major part of the student's success later on in life—and therefore, it's very important to understand the kind of anxiety and uncertainty that the student might experience, even if the students' teachers and classmates don't bear the student any ill will for his or her identity.

### THE ACHIEVEMENT GAP

While the key theme of *Whistling Vivaldi* is identity, Steele's book is also an attempt to understand, and take a few more steps toward solving, a major problem facing America in the 21st century: the achievement gap. Across many different fields, minorities are less successful than white Americans—they "underperform" compared to white Americans. Whether on standardized tests, income, or employment, there is a "gap" between what the average white American and the average minority American (or the average man and the average woman) achieves. Steele's book—and the bulk of his professional career—is structured around understanding and explaining this achievement gap.

In the first chapters of the book, Steele goes over some of the traditional explanations for the achievement gap. To begin with, the achievement gap is, at least in part, the product of structural racism in American society. There are numerous laws, business practices, and economic policies that have been shown to favor whites over minorities, and men over women. But although structural inequalities of this kind can partially explain the achievement gap, they can't explain it completely. As Steele points out, white university students outperform black university students, even when they come from families with the same income, and even when they got the same SAT scores in high school. There must be some additional factor at work, in addition to the material, economic gap between white and black Americans. Tragically, some Americans have and continue to maintain that the achievement gap proves that white Americans are genetically superior to minorities, or that men are genetically superior to women. While one might think that this bigoted idea would have no place in academia, Steele points out that even the president of Harvard University, Larry Summers, was at least willing to entertain the idea that women are genetically inferior to men when it comes to mathematics. Another explanation, which is less overtly bigoted but still problematic, suggests that minorities are "damaged" by a lifetime of prejudice, and so have less motivation to succeed. In no small part, Steele was motivated to study the impact of stereotype threats because he wanted to lay to rest, once and for all, bigoted explanations for the achievement gap.

In contrast to the geneticist hypothesis and the lack of motivation hypothesis, Steele advances the argument that many American minority groups underperform in comparison to white Americans because they're distracted or disturbed by the mere threat of confirming a stereotype, as exacerbated by environmental cues in their present setting. Thanks to the many experiments Steele has conducted at Stanford University, Steele was shown that different groups' fear of upholding a stereotype does often cause them to underperform on tests. On the other hand, minority groups who have stereotypes mitigated or erased perform at the same level as their white male test-taking counterparts.

This suggests, first of all, that the achievement gap *isn't* the result of an inherent genetic deficiency in women, black people, or other groups that have traditionally been marginalized—under fair circumstances, these groups perform

as well as white men. Second, Steele's findings suggest the real reason for the achievement gap: when taking exams, minorities are more vulnerable to the threat of stereotypes than white Americans are—not because they're inherently weaker or more vulnerable people, but because they're keenly aware of the negative stereotypes associated with their group, and waste valuable time and energy dealing with these stereotypes. (On the other hand, Steele has found, white people tend to be more vulnerable to the threat of stereotypes than black people are when they're tested on their athletic abilities—because there's a stereotype that white people are inferior athletes compared to black people.)

One might argue that Steele is focusing too much attention on a relatively minor cause of the achievement gap (stereotype threats) rather than the major cause (structural, economic inequalities). But Steele isn't denying that there are structural reasons for the achievement gap, or suggesting that policymakers should try to reduce these inequalities. Rather, he suggests that educators and parents can do a surprising amount on an individual, personal level to reduce the achievement gap by protecting their students and children from the influence of stereotype threats.

## EXPERIMENTATION AND THE SCIENTIFIC METHOD

For more than three decades, Claude Steele has been studying the psychology of stereotyping. In *Whistling Vivaldi*, he revisits his long, successful career, showing how his thinking on the subject of stereotyping has evolved. At the same time, Steele shows readers how a good social psychologist uses research and experimentation to learn about the world, and walks readers through every step in the scientific method.

Like any successful scientific investigation, Steele's research into stereotyping begins with a question in need of an answer. In the late 1980s, Steele is just beginning his career as a professor. He's interested in the state of affairs on college campuses—specifically, the way that black students interact with their environments. More generally, Steele wants to understand why black students—and other marginalized groups—often underperform in college, even if they have excellent SAT scores and promising futures. As he proceeds with his research, Steele and his colleagues form their own hypotheses about why an achievement gap between black students and white students exists. Steele considers some of the other explanations for the achievement gap that scientists have devised, such as the structural inequality explanation, or even the genetic explanation (see Achievement Gap theme). It's important to recognize that, while Steele despises the genetic explanation—i.e., that blacks are cognitively inferior to whites—he's at least willing to entertain it. Steele then hypothesizes that the achievement gap is the product of

stereotype threats, and tries to devise an experiment that will pit his hypothesis against the genetic hypothesis. In this way, he builds a compelling, scientific case refuting the genetic hypothesis.

By carefully designing experiments, Steele gathers more and more information about stereotype threats, while also pointing the way toward further research. In his earliest experiments, Steele studies the relationship between stereotype threats and academic performance in one particular group of people—first women, and then black students. Steele's findings—that stereotype threats impede the cognitive abilities of both of these groups—answer his initial question about black students' achievement gap. His findings also pose new, more ambitious questions for him (and his colleagues) to solve. Having shown that there's a strong link between stereotyping and cognitive performance in at least two marginalized groups, Steele challenges his fellow social psychologists to replicate his findings with other groups of people. Furthermore, Steele's findings inspire other psychologists to measure the experience of stereotyping in various ingenious ways—for example, one study measures the heart rate and blood pressure of stereotyped test-takers, providing a physiological basis for the experience of stereotyping.

Ultimately, Steele's career paints an impressive portrait of the scientific method. By entertaining many different explanations for a phenomenon, scientists like Steele gradually build a compelling case for one particular hypothesis. Furthermore, scientists' studies and experiments advance the entire scientific community's understanding of an issue. Steele's characterization of the scientific community is almost utopian: scientists share their findings with one another, so that the scientific community, and the entire world, can benefit from an ever-growing body of knowledge.

## FIGHTING STEREOTYPES

In *Whistling Vivaldi*, Claude Steele doesn't just diagnose the problems of stereotyping. He also goes on to recommend some of the ways that teachers, parents, and policymakers might fight the influence of stereotyping.

The solutions that Steele recommends are centered around the same idea: stereotype cues can't be eliminated entirely, but they can be minimized or canceled out. Steele argues that almost any environment, whether it's a classroom or a subway, is bound to have some features that provoke stigmatization and the fear of being stereotyped. Something as minor as a joke, a cartoon, or a seemingly neutral statement can, under the right circumstances, elicit anxiety and doubt in people from a marginalized group, particularly if a large number of these environmental cues arrive at the same time. To minimize the impact of negative cues, Steele argues, people can add positive cues that calm people from marginalized groups. For example,

Steele found that assuring black test-takers that their exam *didn't* measure their cognitive aptitude caused them to do better on the test. In other words, the test proctor's verbal cues neutralized any anxiety the students had about taking a test of intelligence—which could have (and did, in the experiment's control group) impaired their performance on the test.

While some of Steele's measures for neutralizing the threat of stereotypes can be useful in a test-taking environment, it can be difficult to understand how Steele would apply these measures to the real, non-"controlled" world. For example, the primary reason that the black students in Steele's experiment avoided stereotype threats was that the test proctor lied to them about the nature of the test they were about to take (it did, in fact, measure cognitive ability). In general—and as Steele himself would be the first to admit—some of the measures that Steele uses to neutralize stereotyping and improve performance are too particular and impractical to be used to fight stereotyping in society in general.

While Steele acknowledges that canceling out stereotypes is a difficult process, he does offer some possibilities for doing so that might be more practical in a real-world setting. Many of these strategies revolve around a classroom setting, where it's relatively easy for an educator to control the students' environmental cues. Some of the most compelling methods that Steele discusses involve using a mentor system of some kind. Steele has conducted studies suggesting that black students are often most receptive to forms of mentorship where the mentor uses a mixture of high standards and strong encouragement. This form of mentorship is particularly powerful for students from a minority background because it shows that the mentor will not condescend to them, and knows that the students can succeed. Steele also discusses self-affirmation strategies. According to this principle, teachers should encourage their students to make lists of their values and goals in life. Some studies suggest that even the most rudimentary versions of this exercise cause students to get higher grades in class. Steele argues that the self-affirmation strategy is so effective because it helps students create a narrative of motivation and belief that protects them from negative stereotypes.

It may be impossible for people to eliminate stereotype cues altogether—and as long as America protects free speech, there will be certain statements and images that provoke stereotype threats and impede people's behavior in measurable ways. But even if the anxiety of stereotyping can't be avoided, Steele shows how, by introducing stereotype-canceling strategies where they count—people can minimize the effects of stereotyping and encourage people to perform to the best of their abilities.

## AUTONOMY AND FREEDOM

In *Whistling Vivaldi,* Claude Steele advances a somewhat counterintuitive view of human autonomy and freedom. As he acknowledges upfront, most people would probably say that human beings are relatively independent: they have the ability to make free choices, mostly unaffected by the influences of other people or their environments. Prior to the late 1980s, Steele suggests, the social psychology community was generally committed to this traditional, commonsense view of free will. For example, when studying the underperformance of minority students, many social psychologists offered the following explanation: minorities in America, particularly African Americans, had been the victims of prejudice for so long that they grew up permanently traumatized by their experiences. According to the pre-1980s social psychologist's interpretation, a black student who underperformed on a test was the victim of a lifetime of prejudice, but was also taking the test to the best of his or her abilities, and exercising his or her free will by making conscious choices about how to answer the questions. (The writer Te-Nehisi Coates wrote a fascinating article for *The Atlantic* about how this interpretation of prejudice and individual agency was twisted into a policy of "blaming the victims.")

In place of the traditional view of prejudice and individual agency, Steele developed a new theory that argued that stereotyped groups were the victims of ongoing, uncontrollable environmental cues. Steele argues that environmental cues (for example, administering a test and telling black students that the test is designed to measure intelligence) can trigger feelings of anxiety and nervousness that interfere with people's abilities to think rationally. Steele's argument was, and is, provocative, because it suggests that human beings have far less autonomy, and far less control over their own behavior, than we'd like to believe. For example, during some of Steele's experiments, participants experienced elevated heart rate, high blood pressure, and unclear thinking as a result of stereotype threats. And yet the participants didn't even realize that they'd *been* anxious about this—as far as they were concerned, they'd tried their hardest, and were completely responsible for their own success or failure. Steele replicated his findings across dozens of identity groups in a variety of different settings, providing strong evidence that all human beings—not just minorities—are constantly being nudged and swayed by environmental cues, most of which they never consciously notice.

Perhaps the most provocative part of Steele's theory of individual agency is its suggestion that sometimes nobody is truly responsible for the stereotyping—and, indeed, that "responsibility" itself is often an illusion. Throughout the book, Steele vividly describes the fear, panic, and self-doubt that afflict people when they feel stereotyped. But Steele is also

careful to show that, quite often, stereotyped people feel these emotions even when no one they're interacting with is being bigoted in any intentional way. Stereotyped students' underperformance can't be considered their own fault, since they're reacting to a constant stream of stigmatizing anxiety-inducing environmental cues. And yet, their underperformance isn't necessarily the fault of the test proctor, the other students in the room, or of any particular person. Steele's interpretation of human autonomy can be difficult to grasp, since people are used to the idea that individual people are responsible for their own actions. But perhaps it's too simple to attribute stereotyping to any individual, autonomous people—after all, the very idea of a stereotype requires wide cultural reinforcement. Steele's theory is broader than the usual tendency to blame particular people for a problem, but it also leaves room for individual agency, especially in trying to *solve* that problem.

# SYMBOLS

Symbols appear in **teal text** throughout the Summary and Analysis sections of this LitChart.

## JOHN HENRY

John Henry was a legendary African American folk hero. The historical accuracy of his life (and whether he existed at all) is debatable, but according to legend he was a railway worker renowned for his ability to drive spikes into railroad tracks, and he died after winning a race against a mechanized spike-driving machine. For Claude Steele, John Henry's hard, but ultimately self-destructive work ethic is a symbol for the "over-effort" often seen among highly talented, ambitious members of underrepresented groups—for example, black students at elite universities. In Steele's view, these people often push themselves too hard, determined to make up for centuries of prejudice, and as a result damage their own chances for success and happiness.

## THE SWIMMING POOL

Claude Steele begins the book by describing the day he first "realized" that he was black. In the 1950s, when Steele was a child, Chicago was a heavily segregated city, and one summer's day, Steele was surprised to learn that because of his race he wasn't allowed to go into the nearby swimming pool to cool off. In other words, Steele first became aware that he was black in the instant that he learned that black people were banned from the pool. For Steele, this humiliating incident is a symbol for the power of social contingencies. In this case, the rule against swimming in the pool is an identity-defining contingency (if Steele goes in the

pool, then he will be breaking the law—therefore, he is black). At the same time, the swimming pool symbolizes the power of negative contingencies in defining identity. More often than not, Steele argues, people come to understand their identities because of negative, painful experiences, such as being banned from a pool.

# QUOTES

Note: all page numbers for the quotes below refer to the W. W. Norton & Company edition of *Whistling Vivaldi* published in 2011.

## Chapter 1 Quotes

> I have a memory of the first time I realized I was black. It was when, at seven or eight, I was walking home from school with neighborhood kids on the last day of the school year—the whole summer in front of us—and I learned that we "black" kids couldn't swim at the pool in our area park, except on Wednesday afternoons.

**Related Characters:** Claude Steele (speaker)

**Related Themes:**

**Related Symbols:**

**Page Number:** 1

**Explanation and Analysis**

Steele begins the book with a poignant example from his own life—the day he truly realized that he was black. In the 1950s, Chicago was a racially segregated city, meaning that black people weren't allowed to enter many of the places where white people frequented. Steele, only a small child at the time, was too young to understand the politics of segregation, but he was old enough to understand that, on a hot summer day, he wasn't allowed to go into a segregated "public" pool, simply because of his skin color.

The episode proved enormously influential in Steele's life. Furthermore, it illustrates one of the key themes of Steele's book: negative contingencies (in this instance, being turned away from the swimming pool as a consequence of being black) exert a powerful influence on people's behavior, usually more so than positive contingencies. From an early age, Steele came to associate his black identity with embarrassment and humiliation. Experiences of this kind can be so powerful that they dictate people's behavior for years to come.

*Whistling Vivaldi* is about the experience of living under such a cloud—an experience we all have—and the role such clouds play in shaping our lives and society.

**Related Characters:** Claude Steele (speaker)

**Related Themes:**

**Page Number:** 7

**Explanation and Analysis**

In *Whistling Vivaldi*, Steele advances a challenging interpretation of stereotyping, an important problem facing Americans in contemporary times. Steele considers some of the traditional explanations for stereotyping and prejudice: for example, the explanation that people experience stereotyping because other people harbor bigoted thoughts and take bigoted actions of some kind. Steele doesn't deny this kind of explicit stereotyping, but he also advances a different point of view. He suggests that, even if people aren't experiencing prejudice in any way in a certain situation, the fear of being stereotyped can still follow them, like a dark cloud looming over their heads.

Steele's theory is challenging to understand because it suggests that stereotyping exerts a strong influence on people's behavior, *even if nobody is doing the stereotyping*. The fear of stereotyping by itself is powerful enough to change people's behavior in measurable ways.

## Chapter 2 Quotes

Among students with comparable academic skills, as measured by the SAT, black students got less of a return on those skills in college than other students. Something was suppressing the yield they got from their skills.

**Related Characters:** Claude Steele (speaker)

**Related Themes:**

**Page Number:** 20

**Explanation and Analysis**

In Chapter Two, Steele discusses his early career as a social psychologist. During his time at the University of Michigan, Steele observed a serious problem: black students who'd shown great promise in high school, and gotten excellent grades and SAT scores, weren't always capitalizing on that promise, at least in comparison with white students with similar grades and SAT scores. In Steele's terminology,

something was "suppressing the yield" for the black students at Michigan.

Steele is describing a version of the "achievement gap"—the overall empirical difference between the testing performance of white Americans and that of most other minorities in America. In the late 1980s, when the chapter is set, there were many theories about environmental factors that may have led to this achievement gap. But before Steele proceeded with his research, nobody had made a convincing case for how environmental factors could impair the cognitive abilities of black students at an elite school like the University of Michigan.

On the second day Ms. Elliott turned the tables. She put the felt collars around the necks of the blue-eyed students and treated them the same way she'd treated the brown-eyed students the day before. The blue-eyed students now lost the energy they'd had the day before and behaved the way the brown-eyed students had on that day, huddled and downcast. The brown-eyed students, for their part, were once again eager learners.

**Related Characters:** Claude Steele (speaker), Jane Elliott

**Related Themes:**

**Page Number:** 27

**Explanation and Analysis**

In the 1960s, a schoolteacher named Jane Elliott conducted a famous, and infamous, experiment. To teach her white students about stereotyping and racism, she divided the classroom in half based on eye color: an arbitrary physical trait. On the first day, Elliot treated the blue-eyed students better than the brown-eyed students. As a result, the brown-eyed students quickly started to act more sad and lonely, and their grades faltered. Then, on the second day, Elliot reversed the scenario and began to favor the brown-eyed students instead. Now, it was the blue-eyed students' turn to be glum and anxious.

The beauty of Elliott's experiment was that it emphasized the arbitrary, reversible nature of prejudice. In a single day, a trait perceived as positive, such as being blue-eyed, can become negatively stigmatized. Furthermore, it didn't take much time before the psychological impact of discrimination left an impression on the students. Dozens of Elliott's students have gone on to write about the unforgettable impact Elliott's experiment left on them. For

Steele, the experiment is an important reminder of the arbitrary nature of prejudice, and of the enormous psychological "weight" of discrimination.

●● Steve Spencer and I weren't especially interested in the genetic explanation of sex differences in math. Our idea was that stigma had more to do with these differences than people commonly thought. But we knew, long before the Summers episode, that the genetic question carried huge cultural weight.

**Related Characters:** Claude Steele (speaker), Steven Spencer, Larry Summers

**Related Themes:**

**Page Number:** 36

**Explanation and Analysis**

In this passage, Steele discusses one popular academic hypothesis for the achievement gap in the 1980s. During this period, there were a disturbing number of academics who were ready to advance the hypothesis that minorities underperformed on intelligence tests and SATs because of a genetic, intellectual inferiority or difference. The sociologist Charles Murray published an infamous book called *The Bell Curve* in the 1980s, in which he entertained such a possibility. Later on, in the early 2000s, Larry Summers, then the president of Harvard, made a speech in which he suggested that women may do worse than men on math tests because of their intellectual inferiority.

Steele clearly despises the idea that one group of people's underperformance on a test is the result of biological factors. But in order to disprove this hypothesis for good, he and his collaborator, Steven Spencer, develop an experiment designed to pit the hypothesis against an environmental explanation for the achievement gap. Over the course of his long career, Steele's research has gone a long way towards refuting the unverified, but unfortunately long-lived hypothesis that minorities tend to underperform because of genetic or biological inferiority.

## Chapter 3 Quotes

●● It's conventional wisdom, a virtual stereotype of what causes members of negatively regarded groups to fail. So if something causes black and women college students to perform less well than you'd expect from their skills, it must be—the idea goes—these psychic deficiencies, deficiencies of confidence and expectation, self-sabotaging deficiencies.

**Related Characters:** Claude Steele (speaker)

**Related Themes:**

**Page Number:** 46

**Explanation and Analysis**

In this important passage, Steele distinguishes between his own theory of stereotyping and the one that has become "conventional wisdom" in America. Conventional wisdom says that members of minority groups, such as women or African Americans, are the victims of a lifetime of prejudice and discrimination. The result is that underrepresented groups internalize their persecution. Black students become less confident and ambitious, women second-guess themselves when they're taking math tests, etc. In short, the conventional wisdom (and much of the psychological literature) suggests that bigotry leaves a permanent mark on the individual's psyche.

Steele offers a different interpretation of prejudice. He suggests that, even if underrepresented Americans *are* the victims of a lifetime of discrimination, that doesn't mean that they're permanently harmed. On the contrary, Steele shows that minorities respond to stereotyping because of small, highly specific environmental cues. By reducing the number of cues of this kind, educators and policymakers can help minorities succeed at the same high level as their white male counterparts. Many psychologists still consider this to be a radical theory. But it's also an optimistic theory: it suggests that the battle for equality isn't lost. By understanding the impact of stereotype threats on different identity groups—and by neutralizing these identity threats—educators can help people of all backgrounds perform to the best of their abilities.

●● And third, in finding a reliable means of reproducing in the laboratory the black student underperformance we'd seen in real life, we knew we could examine it up close—tear it apart and see how it worked.

**Related Characters:** Claude Steele (speaker), Joshua

Aronson

**Related Themes:**

**Page Number:** 52

**Explanation and Analysis**

Steele's early experiments at the University of Michigan and Stanford yield some important results, but also establish the need for further research. Here, Steele discusses the single most important finding of his early experiments. He and his research team measure the correlation between black students' performance on difficult tests and the way the test is presented to them. He finds that black students generally perform at the same level as white students, provided that the test is presented to them as a diagnostic, or provided that the test proctor assures them that there's no racial bias on the test. However, if the test is presented as a standard intelligence test—a statement that may raise alarm bells for black students used to racial prejudice—then the black students tend to underperform when compared with white students.

The crux of Steele's research is that internalized prejudice can be measured in concrete ways—for example, experimenters can measure the influence of stereotyping on black students' performance. But, even more importantly, Steele's experiments prove that stereotyping isn't a constant, uniform negative influence on black students' performance. Instead, the threat of stereotype can be exacerbated or reduced, depending on certain environmental cues.

❝ Here was the irony we had suspected. What made Mikel's vanguard black students susceptible to stereotype pressure was not weaker academic confidence and skills but stronger academic confidence and skills.

**Related Characters:** Claude Steele (speaker), Mikel Jollet

**Related Themes:**

**Page Number:** 58

**Explanation and Analysis**

As Steele proceeds with researching the impact of stereotype threats on students, he comes to some surprising conclusions. At one point, he collaborates with a Stanford student named Mikel Jollet. Mikel wants to test some of Steele's findings on inner-city Los Angeles high school students. Steele has found that the threat of

conforming to a stereotype acts as a distraction for elite Stanford students of color—Mikel, on the other hand, wants to test whether this threat will exert any measurable influence on black high-schoolers in the inner-city.

Mikel and Steele find that the threat of conforming to a stereotype does indeed impair black inner-city high school students' test-taking abilities, just as it did a Stanford. Furthermore, the most gifted, motivated test-takers at the school are most likely to suffer from stereotype threats. This, as Steele points out, is bitterly ironic. Bigots have accused black people of being lazy and unmotivated, and suggested that this is the reason for the achievement gap. Steele and Mikel now have concrete evidence that, on the contrary, black students' drive and ambition causes them to suffer excessively from the stereotype threat.

## Chapter 4 Quotes

❝ Maalouf's emphasis is similar to mine: of all the things that make an identity prominent in one's feeling and thinking, being threatened on the basis of it is perhaps the most important.

**Related Characters:** Claude Steele (speaker), Amin Maalouf

**Related Themes:**

**Page Number:** 73

**Explanation and Analysis**

In this passage, Steele makes an important clarification. Thus far, he's been talking almost exclusively about the negative impact of stereotypes. For example, the black Stanford students who underperformed on their tests were responding to their awareness of the negative (and racist) stereotype that black people are less intelligent than white people. Steele cites the writings of Amin Maalouf, a French philosopher and essayist: Maalouf argues that negative stereotypes are almost always more powerful and memorable than positive stereotypes. Furthermore, negative contingencies of some kind—such as a threat—play a bigger role in determining people's identity than do positive contingencies. For example, Steele first became aware of his own blackness because he was cruelly forbidden from attending a public pool in Chicago one summer day. This is an important point, because it explains why students from a minority background underperform on many tests—their awareness of the negative stereotypes associated with their identities, and their fear of confirming the stereotype, causes them to underperform.

If you want to change the behaviors and outcomes associated with social identity—say, too few women in computer science—don't focus on changing the internal manifestations of the identity, such as values, and attitudes. Focus instead on changing the contingencies to which all of that internal stuff is an adaptation.

**Related Characters:** Claude Steele (speaker)

**Related Themes:**

**Page Number:** 84

**Explanation and Analysis**

Steele's social psychology research has arguably caused a paradigm shift in the social sciences. Steele has shown that the fear of being stereotyped can be a powerful determinant of behavior. By removing this fear—through the use of specific environmental cues—policymakers and educators can level the playing field and reduce the achievement gap. This is a radically new approach to the problem of prejudice. In earlier decades, social psychologists focused the bulk of their research on members of minority groups themselves, suggesting that a lifetime of discrimination had left them permanently weakened. Steele, on the other hand, argues that the best way to help underprivileged people is to change the environmental factors that make them feel mistreated. Steele's approach has its own strengths and weaknesses. Controlling the environment in which students take a test is relatively easy—but it's much harder to see how Steele would apply his findings to the real world. How could policymakers change the contingencies associated with going to a store, or walking down the street, or hailing a cab?

## Chapter 5 Quotes

The stereotype threat created by this comment impaired the math performance of exceptionally strong white male math students. No special self-doubting susceptibility seemed necessary.

**Related Characters:** Claude Steele (speaker)

**Related Themes:**

**Page Number:** 92

**Explanation and Analysis**

In Chapter Five, Steele conducts a study of white and Asian American students. The study is designed to measure whether white students will respond negatively to their

perception of the stereotype that Asian Americans are better at math than white, European-Americans. Steele finds that, when the white test-takers are informed that Asian Americans tend to do better than white Americans on the test, they underperform. However, when the test is presented strictly as a test of intelligence, they perform at a higher level.

The most surprising part of the study is that, prior to taking the test, the white American participants weren't (presumably) particularly concerned with the stereotype that Asian Americans are good at math—none of them lived in a community where there were lots of Asian Americans. The mere thought that Asian Americans usually outperformed them, however, was enough to trigger feelings of inferiority that impaired their test-taking abilities.

## Chapter 7 Quotes

[Treisman] saw black students—in an effort to succeed where their abilities are negatively stereotyped—following a strategy of intense, isolated effort, a strategy that often set them up for defeats and discouragements.

**Related Characters:** Claude Steele (speaker), Philip Uri Treisman

**Related Themes:**

**Page Number:** 103

**Explanation and Analysis**

In Chapter Six, Steele deals with a common rebuttal to his own argument. In response to the claim that minorities are impaired by their awareness of societal prejudice, some would argue that, in fact, awareness of societal prejudice can be a powerful motivator—it gives underprivileged people an extra reason to succeed and may, paradoxically, cause them to be more successful in the long run.

In response to this objection, however, Steele argues that it's simply not supported by the facts. He draws readers' attention to gifted black students. By and large, black students tend to study harder, and more independently, than white students. Steele guesses that this is because they think they have something to prove: they want to work hard in order to disprove centuries of offensive stereotypes about the intellectual capabilities of black people. But the problem with this kind of studying, Steele shows, is that is often breeds frustration, self-doubt, and self-sabotage. So

even if the desire to prove stereotypes incorrect *can* be a powerful motivator, it often backfires and causes gifted members of minority groups—such as gifted black students at Stanford—to underperform.

Our ability to grasp our emotions, then, is not perfect. When they are very strong, it is easier to know them directly. But when they are moderate, like the lingering anxiety one would feel after crossing the Capilano Bridge, we have less direct access to them. To know and interpret our more moderate emotions, we rely more on what's going on in the immediate situation.

**Related Characters:** Claude Steele (speaker)

**Related Themes:**

**Page Number:** 116

**Explanation and Analysis**

In Chapter Seven, Steele explores another dimension of the stereotype threat: the challenge of measuring what goes through people's minds while they're experiencing a stereotype threat. In a way, this reflects one of the main problems with social psychology—the difficulty of understanding what people are thinking, without actually looking inside their brains. As Steele points out here, it can be challenging for psychologists to understand their subjects, because people aren't always good at explaining their own feelings and thoughts. In one study, psychologists asked subjects to walk across a high, seemingly dangerous bridge, and then they were given a questionnaire by an attractive female interviewer. They found that the subjects who walked across the bridge were much more likely to call the attractive interviewer afterwards than the control groups, who walked across a sturdier bridge first, or who were given the questionnaire by a male interviewer (the subjects were male and presumably heterosexual). The psychologists used their findings to support the idea that people can't always keep their emotions straight. The experiment subjects confused the emotion of fear with the emotion of sexual attraction, and changed their behavior accordingly. In short, Steele needs a better way of understanding his subjects' emotions during a stereotype threat—because sometimes, they can't explain their own emotions.

The harder the psychology majors (at risk of confirming the stereotype) thought, the more stable their heartbeat interval, the worse they did. Hard thinking for the science majors, under little stereotype pressure, reflected constructive engagement with the test. Hard thinking for the psychology majors, at risk of confirming the stereotype, reflected performance-worsening rumination.

**Related Characters:** Claude Steele (speaker)

**Related Themes:**

**Page Number:** 123

**Explanation and Analysis**

During the years covered in Chapter Seven, Steele faces the challenge of measuring his subjects' physiological reactions to a stereotype threat. This is a particularly daunting challenge because (as in the preceding quote) people aren't always reliable when they talk about their own thoughts and emotions. However, Steele learns about techniques that other researchers have used to understand subjects' thought processes. One experimenter measured his subjects' heart rates, understanding that the regularity of the heart rate is a good metric for the intensity of thought.

Steele applies these techniques to interpreting a psychological study in which psychology majors (who are stereotyped for being less intelligent than "hard science" majors at this particular French university) take a difficult test alongside hard science majors. The study finds that psychology majors experience more regular heart rates—a sign of thinking harder. Furthermore, when they do think harder, they do worse on the test. The hard science majors, on the other hand, think harder and do better. Both groups are thinking hard, but the psychology majors are "wasting" a lot of that brainpower on anxiety. This suggests that the threat of confirming the stereotype that psychology majors are less intelligent than hard science majors acts as a deterrent to psychology majors' success—and becomes a self-fulfilling prophecy. Thanks to his colleagues' contributions, Steele now has physiological, quantitative evidence that stereotype threats interfere with cognitive abilities.

John Henryism sounds like the attitude of people who show stereotype threat effects—people who are identified with, and care a lot about succeeding in, an area where their group is negatively stereotyped.

**Related Characters:** Claude Steele (speaker)

**Related Themes:** 👤 🧑‍🤝‍🧑

**Related Symbols:** 🛤️

**Page Number:** 130

### Explanation and Analysis

Later in Chapter Seven, Steele discusses research that suggests that there are long-term consequences to experiencing stereotype threats. Psychologists have long tried to explain why hypertension is more common in African Americans than in European Americans. One compelling explanation is that African Americans have to deal with a lifetime of stereotyping—and, even more influentially, a lifetime of living with the internalized stress and threat of confirming a stereotype. Steele, based on his own research into overachieving college students of color, suggests that hypertension in the African American community may be the result of ambitious African Americans pushing themselves too hard and trying to overcome centuries of negative stereotyping. For example, Steele has encountered dozens of gifted black students who study by themselves for long hours, and blame themselves when they do poorly on their exams, even if the material is very difficult. When seen in this way, hypertension is a physiological consequence of minorities' striving for success with the obstacle of society's prejudices—a phenomenon that Steele terms "John Henryism," after the American folk hero who "pushed himself" so hard that he died of exhaustion.

## Chapter 8 Quotes

❝❝ The term "critical mass" refers to the point at which there are enough minorities in a setting, like a school or a workplace, that individual minorities no longer feel uncomfortable there because they are minorities—in our terms, they no longer feel an interfering level of identity threat. When Justice O'Connor was alone on the Court, she lacked critical mass.

**Related Characters:** Claude Steele (speaker), Justice Sandra Day O'Connor

**Related Themes:** 👤 🧑 🧑‍🤝‍🧑

**Page Number:** 135

### Explanation and Analysis

Steele continues to develop his nuanced theory of stereotyping by writing about the quantity and quality of environmental cues that can provoke a stereotype threat. He knows that, under the right (or rather, the wrong) circumstances, very mild, almost subliminal environmental cues can cause anxiety and stress in test takers from a minority background. But he also knows that, under different circumstances, test proctors can create a test-taking environment conducive to high achievement for people of many different identity backgrounds.

Steele suggests that the concept of "critical mass" may be useful for understanding environmental cues. In many cases, one or two environmental cues aren't enough to trigger a positive or negative reaction in a subject. However, when enough of these environmental cues are combined in the same place and time, they can have a disproportionately large impact on the subjects' behavior. Steele gives an example of his theory: Justice Sandra Day O'Connor, the first woman on the Supreme Court, felt stigmatized when she was the only woman on the bench. But when Justice Ruth Bader Ginsburg joined her, there were enough woman on the Court—two out of nine—that women gained the "critical mass" necessary to overcome stereotype threats. As a result, both Ginsburg and O'Connor became more confident.

❝❝ Herein may lie a principle of remedy: if enough cues in a setting can lead members of a group to feel "identity safe," it might neutralize the impact of other cues in the setting that could otherwise threaten them.

**Related Characters:** Claude Steele (speaker)

**Related Themes:** 👤 🏢

**Page Number:** 147

### Explanation and Analysis

Steele's findings in Chapter Eight are optimistic. They suggest that, even if it's impossible to totally control an environment, it's possible to engineer the environment so that negative stereotype cues are canceled out, or neutralized, by positive cues, emphasizing that the environment is safe and non-judgmental. For example, a business newsletter that conveys negative cues for African Americans (e.g., a photograph that shows no African American employees) could be neutralized with a positive cue (for example, a headline stating that the company supports diversity).

Steele's findings have had a huge impact on college campuses in the United States. The concept of "safe spaces,"

which has proved both influential and controversial in the last five years, partly arises from Steele's theory that "hostile" environments can be engineered and made "safe"—in the sense that they're conducive to minorities performing well, without the burden of identity threats.

## Chapter 9 Quotes

❝❞ Why was it so effective? It resolved their interpretative quandary. It told them they weren't being seen in terms of the bad stereotype about their group's intellectual abilities, since the feedback giver used high intellectual standards and believed they could meet them. They could feel less jeopardy. The motivation they had always had was released.

**Related Characters:** Claude Steele (speaker)

**Related Themes:** 🧑 🏛️

**Page Number:** 163

**Explanation and Analysis**

In Chapter Nine, Steele continues to discuss some of the preventative measures that can neutralize, if not entirely remove, the influence of identity threats. Here, he discusses a study that investigated the effectiveness of different kinds of feedback strategies for white professors to deliver to African American students. The study found that black students often respond most strongly to feedback from a white professor when the professor uses high, rigorous standards to judge the student's work, but also emphasizes that the student is more than capable of meeting these high standards. As Steele says here, this feedback strategy is effective because it neutralizes the threat of being stereotyped that's simmering beneath the surface for both the black students and their white professor. The professor shows that he or she isn't condescending to his or her students, and also expresses confidence that the students can succeed—thereby sending an overall positive, non-prejudicial message.

❝❞ Black students who got a brief narrative intervention of the sort I just described averaged one-third of a letter grade higher in the next semester than black students in a control group who got the results of a survey about political attitudes rather than about college life.

**Related Characters:** Claude Steele (speaker)

**Related Themes:** 🧑 🏛️ 👥

**Page Number:** 166

**Explanation and Analysis**

Steele discusses another kind of strategy for neutralizing the impact of negative stereotype cues. This strategy, narrative intervention, involves delivering a positive, values-based story, or narrative, to a person from a targeted group. The purpose of this narrative is to remind its audience that they have the potential to succeed, regardless of stereotypes. In one study, which Steele describes in the passage, black college students were given a very brief series of survey results from former black students about how they have the intelligence and drive to succeed, even if they have to deal with racist stereotypes about black people being less intelligent than their white counterparts. The information seems to have caused black students who heard it to better succeed on their exams for the semester.

It seems almost impossible that such a short, succinct "intervention" could have had such a major impact on black students' performances. But, as Steele argues, people tend to underestimate the influence that their environments exert on their actions. If something as simple as reading testimonials can improve students' grades by a third of a letter grade, then perhaps in the future, educators will be able to develop methods of narrowing the achievement gap to the point where it's nonexistent.

❝❞ Heart attacks also have background causes that are difficult to change—genetic history, long-term habits of diet and exercise, smoking, life stress, etc. Nevertheless, the likelihood of a heart attack can be greatly reduced by drugs and surgery. They do nothing to counter the background causes of heart disease; they treat the most immediate cause of a heart attack, blocked coronary arties.

**Related Characters:** Claude Steele (speaker)

**Related Themes:** 🧑 🔀 🏛️ 👥

**Page Number:** 182

**Explanation and Analysis**

In this passage, Steele makes an important clarification regarding his argument. Steele has shown how seemingly unimportant environmental cues can play a huge role in minimizing the effects of stereotype threats, and encouraging people from minority backgrounds to realize

their full potential. However, Steele wants to make it clear that he's not suggesting that society devote its resources only to controlling disadvantaged students' environments. Rather, powerful people need to continue fighting the roots of prejudice—for example, the structural inequalities that perpetuate racism over time. Steele's argument is simply that, even if eliminating the roots of inequality and prejudice may be the most effective way of fighting prejudice, policymakers and educators can still do a great deal of good by concentrating on the most immediate symptoms of prejudice, and the stereotype threats that they often elicit.

## Chapter 10 Quotes

❝ The identity threat explanation doesn't require attributing prejudice to the white passengers. All one need assume, it says, is that they have a worry like Ted's: the risk of saying, doing, or even thinking something that would make them feel racist or like they could be seen as racist in interacting with the black passenger. It takes the perspective of the person whose actions one is trying to explain—the woman or minority taking the math test, for example, or in this case the perspective of the white passengers passing up the seat next to a black passenger. It assumes, in light of present-day norms of civility, that most of these passengers are invested in not appearing as racist. It further assumes that this investment, ironically, may lead them to avoid situations like the seat next to the black passenger.

**Related Characters:** Claude Steele (speaker), Sheryll Cashin, Ted McDougal

**Related Themes:** 👤 🔀 🏙️ 🧑‍🤝‍🧑

**Page Number:** 192

### Explanation and Analysis

Here Steele talks about writer Sheryll Cashin, who points out that, on Southwest Airlines flights (where passengers choose their seats while boarding), there's often an open seat next to black passengers. One could interpret this information to mean that white Southwest Airlines passengers are overtly racist—they change their behavior because they don't want to sit near a black person. But Steele offers a different theory. He suggests that white Southwest passengers are invested in not appearing racist, and therefore choose to avoid even the slightest possibility that they'll seem racist—by choosing not to interact with a black person at all. In other words, white Southwest passengers, in an effort not to seem racist, act in a manner that could be interpreted as racist.

Not everyone would agree with Steele's assumptions in this paragraph, or in the chapter as a whole. Steele seems to take it for granted that contemporary "norms of civility" encourage people not to behave in an overtly racist way. And in general, he seems to believe that there are more Southwest passengers who want to avoid seeming racist than there are passengers who actually harbor racist, anti-black thoughts—which may or may not be the case.

❝ This was Glenn Loury's reasoning. It led him to a surprising claim: the everyday associational preferences that contribute to racially organized networks and locations in American life—that is, racially organized residential patterns, schooling, friendship networks, and so on—may now be more important causes of racial inequality than direct discrimination against blacks. He's not announcing the end of racial discrimination. He's simply underlining the importance of preferences that organize blacks out of networks and locations that could better their outcomes.

**Related Characters:** Claude Steele (speaker), Glenn Loury

**Related Themes:** 👤 🔀 🧪 🏙️ 🧑‍🤝‍🧑

**Page Number:** 198

### Explanation and Analysis

Steele goes on to discuss the research of Glenn Loury, a psychologist and sociologist who believes that networking may be the key to understanding the persistence of seemingly racist behavior in American society. White and black Americans tend to spend the majority of their time with other people of the same race. But this can have enormous social and economic ramifications—for example, when a white and a black applicant are applying for the same job. According to Loury, a white applicant may be more likely to get a job than an equally qualified black applicant—not necessarily because of racism on the part of the employer, but because the white applicant may be more likely to have an "insider" friend who recommends them for the position. In short, different social networks have different degrees of power and influence—and it's not controversial to say that white social networks have historically commanded much more power than black social networks. Therefore, following Loury's logic, it seems plausible that white communities will continue to command more power and prestige than black communities, so long as society remains relatively self-segregated. This occurs not because white people are racist (although that's often the

case too), but because their social advantages perpetuate themselves over time.

The most striking part of Loury's argument is that a scenario that suggests racism, such as a black applicant being denied a position in favor of a white applicant, may not be the result of conscious prejudice at all. Of course, one could also argue that conscious discrimination *does* play a huge role in the continued underrepresentation of black America.

> ❝❝ The prospect of an interracial conversation on a racially sensitive topic made white participants mindful of the whites-as-racist stereotype. And the more mindful they were of this stereotype, the more they distanced themselves from black conversation partners. Worry about being stereotyped was driving them away.

**Related Characters:** Claude Steele (speaker)

**Related Themes:** 🧑 🔀 🏙️ 🌱

**Page Number:** 203

**Explanation and Analysis**

Steele talks about an experiment he conducted in which white Stanford students were asked to have a conversation with two black people regarding racial profiling. Steele found that the white participants tended to move their chair farther away from the black conversationalists when the conversation concerned race than they did when the conversation revolved around a different, less racially charged topic. But instead of drawing the conclusion that the Stanford students were racist, Steele suggests that the students simply wanted to avoid being *seen* as racist. They were shying away from a conversation about race, not because they didn't like black people, but because they didn't want to say the wrong thing and risk being perceived as racially insensitive.

The passage is a good example of Steele's argument that the fear of confirming a stereotype (in this case, the notion that privileged white students are insensitive on matters of race) can be a powerful determinant of behavior. But perhaps it's also a good example of the limitations of Steele's research. Steele's research revolves around the thoughts and behaviors of some of the most educated and elite young people in the country. So perhaps it's not fair for Steele to generalize his findings to the entire American population—perhaps overt, conscious racism is a bigger part of American society, and a bigger determinant of behavior,

than it is in the ivory tower.

> ❝❝ It wasn't prejudice that caused them to sit farther from their black partners conversation. It was fear of being seen as racist—pure and simple. It was stereotype threat, a contingency of their white identities in that situation. It was probably this threat, too, rather than racial prejudice, that caused Ted's intense discomfort in his African American political science class, and that caused at least some of the white passengers to give Sheryll Cashin her Southwest Airlines First Class seat and that might make it difficult for white teachers to engage poor-performing minority students. Who needs the hassle?

**Related Characters:** Claude Steele (speaker), Ted McDougal, Sheryll Cashin

**Related Themes:** 🧑 🔀 🧪 🏙️ 🌱

**Page Number:** 205

**Explanation and Analysis**

In this passage, Steele continues with his analysis of the experiment he conducted at Stanford, in which white Stanford students were asked to have a conversation about racial profiling with two black conversationalists. Steele's findings for the study encapsulate the themes of Whistling Vivaldi in general. As he argues here, white Stanford students, just as much as black Stanford students, change their behavior according to their awareness of the stereotypes associated with their identity. Aware that they might say the wrong thing and offend their black conversation partners—confirming the stereotype that they're racist—the white participants shy away from engaging with their black conversation partners. Steele compares the students' behavior to that of Ted McDougal, a white student in a predominately black political science class, who avoided speaking up in class for fear of offending someone.

The passage builds on Steele's earlier points to suggest that Americans, especially white Americans, are afraid to talk about race because they want to avoid the "hassle" of offending someone, and having to eat their words. The unfortunate result, Steele argues, is that Americans' understanding of race and prejudice remains frozen, "chilled" by the lack of open discussion. In the final chapter of the book, Steele suggests some of the ways that people might better come together and have more open, honest discussions about stereotyping and prejudice.

## Chapter 11 Quotes

❝ When I look over my life as an African American, I see improvements in the contingencies attached to that identity. The swimming pool restrictions of my youth are gone. So are the suffocating limitations Anatole Broyard would have faced as a black man in New York City in the late 1940s. Things have gotten better. But remember, contingencies grow out of an identity's role in the history and organization of a society—its role in the DNA of a society—and how society has stereotyped that identity.

**Related Characters:** Claude Steele (speaker), Anatole Broyard

**Related Themes:** 

**Related Symbols:** 

**Page Number:** 212

### Explanation and Analysis

In this passage, Steele brings together many of the themes and ideas he's discussed earlier in Whistling Vivaldi, while also painting a picture of how Americans might change their perception of identity in the future. Steele began the book by discussing the embarrassment and frustration he felt on the day he learned that black people weren't allowed to swim in the same public pools as white people. In the final chapter, Steele discusses the election of President Barack Obama. African Americans are, Steele suggests, much better off today than they were in the 1950s—or, to use Steele's own terminology, their identity contingencies have changed, permitting them more freedom and peace of mind.

But Steele doesn't accept, as many culture critics did, that America has become a post-racial society with the election of a black president. On the contrary, Americans' awareness of race, and of identity stereotypes, will continue to influence their behavior for generations to come. Steele has shown how even educated, highly intelligent black Stanford students can underperform on exams as a result of their hyper-awareness of racist stereotypes. Overt racist sentiment may have subsided since the 1950s, Steele implies, but the "echo" of racist stereotyping continues to impair people's behavior.

# SUMMARY AND ANALYSIS

The color-coded icons under each analysis entry make it easy to track where the themes occur most prominently throughout the work. Each icon corresponds to one of the themes explained in the Themes section of this LitChart.

## CHAPTER 1

When Claude Steele was seven or eight years old, he says, he realized for the first time that he was black. He was walking home from school at the start of the summer, and he learned that black kids weren't allowed to swim in the nearby **swimming pool**, except on Wednesdays. Steele was living just outside of Chicago at the time, the late 1950s, and for the rest of the summer, he became aware of how his life was shaped, and restricted, by being black.

*Steele begins with a poignant personal example. In 1950s America, many public areas were segregated by race, meaning that black people couldn't go to the same places as white people. Steele thus became truly aware of his blackness—that is, the way society perceived him as such—not as something to be proud of, but rather as an impediment to his freedom (his ability to enjoy the pool on a hot summer day).*

Years later, Steele spoke to one of his students (who he'll discuss later in the book in more detail)—the student was one of the few white students in a largely black political science class, and he admitted to Steele that he was intimidated about speaking in class: he was afraid that he'd say the wrong thing and appear insensitive. Steele calls this kind of experience the recognition of a *"condition of life."* Just as Steele became aware of his own "condition" of blackness at the **swimming pool**, his student was made to feel aware of being white in a mostly black class.

*Steele compares his experiences as a black man in the 1950s to the experiences of a white student in the 1990s. It's important to understand that Steele isn't making any kind of statement about the relative suffering of his white student or his childhood self. Rather, he's merely suggesting that all people understand their identity through the way other people act around them, and the way they feel around other people. As the two examples would suggest, people often come to understand their identity through negative feelings.*

In this book, Steele says, he will discuss identity contingencies, a concept which describes the aspects of identity (such as age, sexual orientation, race, gender, political affiliation, health condition, or class) that people have to deal with in a social situation, particularly aspects that people have to deal with to get what they want. For example, Steele had to deal with his race when trying to enjoy the **swimming pool**, and in the end he had to restrict his behavior and swim only one day of the week.

*Steele sums up what his two examples have already suggested: people come to terms with their identity not just by learning about what their identity* is *but by understanding how other people* react *to their identity, and seeing how their identity influences other people's behavior in a social situation.*

America is a society of individuals, and many people don't want to believe that their behavior is influenced by their identity. But Steele will show that, in reality, social identity exerts a huge influence on people's performance in school, success in the workplace, memory capability, and even athletic performance. Identity contingencies can influence people's behavior in overt, literal ways—for example, the rules against black people swimming on a Thursday. However, they can also influence people in more subtle ways, acting as an intangible "threat in the air."

*Most people don't really want to believe that their environments exert a huge influence on their behavior and thoughts. But this is exactly what Steele is trying to argue. As he'll show, environmental cues, even (and especially) when they're barely noticeable, can influence people to a degree that many would find incredible.*

Steele will focus on one particular kind of identity contingency: the stereotype threat. Stereotyping is "a standard predicament of life"—human beings have the intellect to judge other people before they know them, and virtually all people stereotype in some way, "perhaps several times a day." For example, as a graduate student, the *New York Times* columnist Brent Staples would regularly notice white people moving away from him in fear. Staples was the victim of the stereotype that black men are especially violent or dangerous.

But Staples found a way to dilute the black stereotype. When he walked down the streets of Chicago, he whistled the music of Antonio Vivaldi, a composer often associated with "high white culture." By displaying knowledge of this culture, Staples caused himself to be perceived as an educated and sophisticated person, not a "violence-prone African American youth." *Whistling Vivaldi*, then, is about what it's like to live in a "cloud" of stereotypes, and the ways this cloud influences people's lives.

A recent psychological study asked participants to play miniature golf. Some participants were told that the study measured "natural athletic ability," while others weren't. Psychologists found that white people who thought the experiment measured athletic ability did worse than whites who didn't. The researchers suggested that white participants were aware of the stereotype that white people are less athletically gifted than black people—thus, by reminding them of the stereotype, the researchers were slightly impeding their athleticism. The researchers also found that black participants performed the same whether or not the study was said to test natural athletic ability.

But the researchers didn't stop there. They suggested that there must be a way to impede the performances of black participants, too—all the researchers had to do was frame the study as having something to do with a negative stereotype relating to black people. This time, the researchers told participants that the golf study was designed to measure "sports strategic intelligence." This time, white participants showed no difference in performance, but *black* participants who were told the purpose of the experiment did worse than black participants who weren't.

Stereotypes, like the ones the participants in the experiment faced, can exert a measure of influence on people's behavior. Even if stereotypes can't be overturned entirely, Steele argues, they can be reduced and improved.

*The real subject of Steele's book, one could argue, is the stereotype threat: the fear of acting in a way that will confirm or evoke a stereotype about one's identity. Human beings may be hard-wired to think in terms of stereotypes. But of course, stereotypes can be harmful and insulting—the stereotype that black men are inherently violent, for example, has caused a huge amount of unjust suffering throughout American history.*

*Notice that Staples doesn't defeat the stereotype that black men are violent, or address the underlying cause of his anxiety—racist white people. The white people he encounters in the street are still going to treat other black men prejudicially, and society hasn't been changed in any way. But on a personal level, Staples has made his own life better and easier. In essence, he "balances out" the racist stereotype with another stereotype, namely, that people who like classical music are more "civilized" and therefore trustworthy or safe.*

*Steele gives an example in which white participants' performances are impaired by their awareness of a stereotype. In many of the studies he conducts later in the book, he's trying to measure the responses of black, female, or working-class subjects to their own stereotypes. However, Steele also makes it clear that people of all identities, no matter how powerful or persecuted, react to the stereotypes about their group.*

*By reversing the results of the experiment, the researchers prove that people of all kinds are equally susceptible to stereotype threats. The black and white participants don't want to confirm the stereotypes about their identity group, and the added stress of worrying about the stereotype impairs their performance.*

*In a way, Steele wants to "make peace" with stereotypes. He acknowledges that stereotypes can't be defeated overnight, but at the very least their negative influence can be limited.*

Imagine an experiment, Steele says, in which a woman is asked to solve math problems. Would the woman be impaired by her awareness of the stereotype that women aren't good at math? Would her nervousness about living up to this stereotype influence her life in other ways, too? Throughout the book, Steele will describe his years of stereotype research. In a sense, he's spent most of his professional career trying to understand stereotyping.

*Here, Steele lays out the course of the book. He will discuss his long, successful career as a social psychologist, and in the process he'll describe the ways the scientific community's understanding of stereotyping has changed in recent decades, thanks in no small part to his own research.*

One of the most basic assumptions that Steele uses when studying stereotyping is that "everyone is capable of bias." Working from such an assumption, Steele has identified various patterns of behavior. One pattern is that contingencies (dependence on or response to chance or outside events) exert a powerful influence on people's lives. Another pattern is that identity threats play a major role in many of society's problems. Third, Steel has noticed that identity threats impair "a broad range of human functioning." Finally, he's identified some things, many of them seemingly insignificant, that people can do to minimize the influence of identity threats. Steele will now guide readers through the "journey" to understanding identity threats, beginning in Ann Arbor, Michigan, 1987.

*It's important to understand that, while Steele writes very movingly about his experiences as a black man in predominately white academia, he never argues that black people are more susceptible to the threat of stereotypes than other groups. Rather, his research suggests that all kinds of people respond to stereotypes, and the threat of confirming them. In this way, he suggests that stereotypes afflict all people's abilities, and, therefore, that minimizing the influence of stereotype threats can help everyone.*

## CHAPTER 2

In 1986, Claude Steele was a professor at the University of Washington in Seattle. That spring, the University of Michigan offered him a job. He was asked to teach in the university's social psychology department, but also to lead an academic-support program for minority students. Steele was worried that his duties with the academic-support program would interfere with his own research.

*Throughout the book, Steele cuts back and forth between his own biography and the history of stereotype research. At this stage in his career, he thinks that working with minority students is distinct from his research—but he quickly comes to realize that doing so actually is his research.*

On a visit to the University of Michigan campus in Ann Arbor, Steele decided that he wasn't going to take the job, because it would impede his research. But he was impressed by the university's mission: it was actively trying to help students from underrepresented backgrounds. After his visit, Steele decided that his career was now headed "in a different direction."

*Steele wanted to use his training and influence to help students from targeted communities, and run studies on the experiences of minority students at predominately white universities.*

During his visit to Ann Arbor, Steele talked to several minority students about their experiences. These students were bright and had been successful in high school, but in college they were constantly being made aware of the fact that they were minorities. They also felt that black "styles, preferences, and interests" were ignored on campus. Also during his visit, Steele saw some provocative data about SAT scores. He read graphs showing the correlation between SAT scores and college grades, and was surprised to learn that black students were likely to receive lower grades than white students, even if they had the same SAT scores. Something, Steele realized, was "suppressing the yield" for black students. Steele resolved to study what, exactly, limited black students' success.

*Like any good scientist, Steele began by identifying a problem—the "achievement gap" between white and black students at the University of Michigan. The core of Steele's observation is that, even when black students succeed in high school, they're more likely to underperform their white peers when they arrive in college. Steele began to form a hypothesis to explain the evidence—that there must be some kind of environmental reason that promising black students weren't succeeding as effectively as white students at the University of Michigan.*

In 1987, Steele accepted an offer from the University of Michigan, and moved to Ann Arbor with his wife and children. There, Steele collaborated with another social psychologist, Richard Nisbett, to understand black students' underperformance. He learned that black underperformance was a nationwide phenomenon. Other minority students, such as Latinos and Native Americans, also underperformed in college based on their SATs. Based on his discussions with black students on campus, Steele began to suspect that underperformance was the result of students' experiences—"something in the air on campus."

*Before he began conducting studies on black students' underperformance, Steele had to understand the full scope of the problem. The pervasiveness of minority underperformance suggested that there were environmental factors on college campuses that made minority students feel unwelcome and impeded their academic success. 1987 was milestone in Steele's career because it signaled his choice to relocate to Michigan and, by the same token, study student achievement in more depth.*

A few years later, Steele delivered a talk on his research at another institution of higher learning. During his time there, he met with researchers who'd studied the progress of minority students, and learned that minorities at the college weren't integrated into campus life and had "segregated friendship networks," meaning that they largely stuck with other people of their same group. While Steele talked with the other academics, he could also feel a peculiar tension in the room—as if the professors were terrified that they were going to say something racist.

*As in the first chapter, Steele parallels examples of black students feeling uncomfortable with examples of white academics feeling uncomfortable (because they're afraid of saying something offensive to black professors like Steele himself). Steele isn't saying that what white college professors face is in any way comparable to what black students go through. Rather, his point seems to be that people of all identities feel a certain environmental pressure, which hangs like a dark cloud over their behavior.*

Steele also met with black students at the college. They told him about incidents in which professors expressed racist sentiments to them, sometimes seemingly accidentally. They also noted that they felt marginalized on campus, with the result that they spent most of their time with other black students. But Steele also encountered a problem: the reported incidents of racism didn't seem common enough to explain the performance gap between black and white students. There had to be other factors causing the gap—perhaps even a "concentration of factors."

*Right away, Steele takes the position that overt, conscious racism, while real and dangerous, isn't the primary factor in explaining most black college students' college performance. Rather, as he suggests in his later research, unconscious displays of prejudice, or environmental cues that trigger the fear of prejudice, are also to blame. Of course, not everyone would agree with this claim.*

Steele describes the experiences of a schoolteacher named Jane Elliott in the late 1960s. Elliot tried to teach her students, who were all white, about discrimination. She divided the class based on eye color—the brown-eyed students were identified and separated from the blue-eyed students, who were given first access to "lessons and materials." The brown-eyed students were humiliated and made to wear collars—they didn't speak up in class, and kept to themselves. The blue-eyed students, on the other hand, were relaxed and happy. But then Elliot switched the arrangements: this time, brown-eyed students were favored and blue-eyed students were treated as inferior. Now, brown-eyed students seemed happy, and blue-eyed students were quiet. Stigmatized students also didn't learn as well in class—they seemed to pay less attention to Elliot, and they had trouble remembering instructions.

*Elliott's experiment has been widely praised and criticized. At the core of her experiment was the idea that stereotypes and feelings of inferiority can arise, seemingly out of thin air. (After all, before Elliot organized her classroom, her students didn't discriminate based on eye color.) Elliott's experiment provides compelling evidence that stereotypes have a profound impact on people's self-esteem, energy level, and cognitive capabilities. Furthermore, it suggests that stereotypes, even if they can't be prevented altogether, can be manipulated, provoked, and—Steele hopes—neutralized.*

Steele came to realize that college students were stigmatized in much the same way as the students in Jane Elliott's classroom. The difference was that Elliott stigmatized her students on purpose, whereas American colleges did so inadvertently. In spite of their best efforts, Steele hypothesized, colleges replicated the state of American society, meaning that black students felt stigmatized, and underperformed academically as a result.

*Steele suggests that the University of Michigan was inadvertently perpetuating the alienation of its black student body. As his research later shows, the university used language and practices that unknowingly provoked stereotype threats in its black students, causing them to alter their behavior and underperform on exams.*

Steele collaborated with a University of Michigan researcher named Steven Spencer to understand group underperformance in college. Steele hypothesized that stigmatization caused black underperformance—certainly, it was preferable to the hypothesis that black students underperformed because of biological inferiority. Steele and Spencer tested their ideas by studying students at their own university—specifically the performance of women in high-level math classes. Initially, they noticed that women tended to underperform in math classes, but *not* in English classes—possibly because of the stereotype that women weren't good at math, which created a "chilly atmosphere" in the classes.

*Steele and Spencer design their study with a clear hypothesis in mind—namely, that underperformance arises from environmental factors, rather than biological inferiority. During the 1980s, the sociologists Charles Murray and Richard Herrnstein published a book called* The Bell Curve, *which entertained the hypothesis that there was a genetic basis for the difference in IQ between black and white people. While Murray and Herrnstein's findings were very controversial, they gave Steele the motivation to disprove the genetic explanation.*

Steele and Spencer prepared a study recruiting men and women who'd done well on the math section of their SATs. One by one, they administered tests—half of them in math, half in English—for the students. Steele and Spencer hypothesized that women would underperform on the math test as a result of the strong social stigmatization against women and math, while performing equally to men on the English portion. This, as it turned out, is exactly what happened. However, Spencer and Steele knew that much more research was needed.

*Before Steele and Spencer tested the influence of environment on performance, they had to understand the scope of the problem—thus they measured women's underperformance on math tests.*

Why, exactly, had the women underperformed on the math test? Spencer and Steele hypothesized that they'd underperformed because they wanted to avoid the stigmatizing view of themselves. However, as scientists, Steele and Spencer also had to consider the biological explanation—i.e., that men were naturally better at math than women. In the 1980s, psychologists ran tests suggesting that women were genetically likely to be worse at math than men. Genetic explanations of behavior have been popular for a long time. Even Larry Summers, the president of Harvard University, entertained the notion that women are biologically inferior to men. Summers later resigned from Harvard, partly because he proposed such a controversial hypothesis. Steele and Spencer didn't take this hypothesis seriously, but they knew they had to test it.

*Steele gives a sense for the disturbing pervasiveness of the genetic explanation for underperformance in academia. (Since the 1980s, the sociologist Charles Murray, author of* The Bell Curve, *has claimed that the case for the genetic hypothesis has only gotten stronger.) While Steele disagrees with this hypothesis (and seems to find it sickening), he knows that he needs to take it seriously, if only to disprove it. Like a good scientist, Steele keeps an open mind while also using the evidence to strengthen his hypothesis, refuting other hypotheses in the process.*

Spencer and Steele had two hypotheses: 1) women underperformed because of stigmatization, or 2) women underperformed because of some biological inferiority. They needed to develop an experiment that could test the hypotheses. This was challenging, because, by definition, the stereotype of being bad at math was a part of women's normal lives. The difficulty, then, wasn't in facilitating women's feelings of inferiority, but in eliminating them in a second group. In the end, Spencer and Steele decided to tell women, before they took the test, that women had always performed as well as men on this particular test.

*At this point in their research, Steele and Spencer have a lot of questions about stereotypes—for example, are there situations in which stereotypes play a particularly large or small role in dictating people's behavior? In the course of their experiment, Spencer and Steele are testing the idea of whether they can exacerbate or neutralize stereotype threats with simple verbal cues (like telling women that their test is gender-equal).*

The second challenge with developing the experiment was finding a way to pit two hypotheses against one another. Spencer and Steele decided that, if women performed as well as men when the "stigma pressure" was reduced, they could reasonably conclude that stigma pressure influenced on women's performance on math tests. If not, they'd have evidence that women really were worse at math. Spencer and Steele found that, when women were told that their test didn't show gender differences, they performed at the same level as men, and when they weren't given this information, or were given information highlighting gender stereotypes, they underperformed. These findings changed Spencer and Steele's professional lives.

*Steele and Spencer clearly favored one hypothesis over another (they didn't believe that there was a biological basis for women's underperformance), but they also designed an experiment in which the hypothesis they disliked would have a fair chance to prevail. Fortunately, the environmental hypothesis "won out," putting Steele on a path of researching the scope and power of stereotype threats.*

Since their first experiments at the University of Michigan, Spencer and Steele have spent years studying the stigmatization of women. Women, they've found, are often confronted with the threat of "being seen to confirm society's darker suspicions about their math ability," a threat that impedes their performance. This is still a radical idea, because it suggests that stereotypes can be perpetuated even without people consciously perpetuating them.

*At the most basic level, Steele's research is controversial and counterintuitive because it suggests that individual people aren't always to blame for the perpetuation of stereotypes. For example, during the math experiment, nobody in the room was expressing sexist ideas. And yet the "cloud" of sexism continued to impede the women's test performance.*

In the 1980s and early 1990s, when Steele and Spencer presented their findings, other academics misinterpreted them very slightly: they argued that Steele and Spencer's findings just proved that women self-fulfill society's lower performance expectations. This wasn't quite what Spencer and Steele were arguing. Rather, they argued that there were very specific factors that could trigger women's stigmatization, and that by removing these factors, they could improve performance. Nevertheless, they understood that they had more research to do.

*Before the 1980s, social psychologists tended to take the position that minorities underperformed because their abilities had been stunted by a lifetime of prejudice (for a good example of this kind of reasoning, readers might consult Daniel Patrick Moynihan's* The Negro Family: The Case for National Action*). Steele takes the more challenging view that underperformance because of stereotyping or prejudice is a fluid, constantly shifting process of reactions to one's environment.*

## CHAPTER 3

In 1978, the Seattle Supersonics nearly won the NBA championship, and the year after that, they won. Previously, they'd been a mediocre team—then, suddenly, they changed coaches and became a sensation. Before 1978, journalists had generally written negatively about the Supersonics. Afterwards, the same journalists began to praise the players, celebrating what they'd previously described as the players' weaknesses. In short, journalists began with a conclusion about the team—that it was good or that it was horrible—and then worked backwards to explain that conclusion.

*Sports writers worked backwards from the conclusion that the Sonics were a bad team—as evidenced by their poor play—and then went on to rationalize their conclusion by blaming the individual players themselves.*

In many ways, Steele says, social science is like sports writing: researchers start with a conclusion and then work backwards to justify it. Too often, researchers have explained the underperformance of black students by noting the students' "psychic deficiencies." The conventional wisdom said that black students were so used to hearing that they were inferior that they eventually accepted that they really were inferior.

*Too often, social psychologists have explained minorities' underperformance by claiming that minorities have been permanently damaged by prejudice. This defeatist way of thinking would suggest that there is nothing, or very little, that society can do to reduce the achievement gap—what's done is done.*

In 1978, Seattle sportswriters began to see the Sonics "for what they really were." The Sonics' winning record made it obvious that player deficiencies couldn't be the reason for their failures in the past. Like sports journalists in 1978, Steele had found evidence that women performed as well as men on difficult math tests, provided that certain forms of stigmatization were minimized. The next step was to test if this applied to other minorities—for example, if black students would perform as well as white students on a test if researchers reduced stigmatization.

*Steele himself works backward from the evidence that women can, under the right circumstances, perform at the same high level as men on math tests. Having studied this phenomenon, Steele goes on to devise further experiments to measure women's performance on math tests in more detail, working from the hypothesis that the feeling of being stereotyped can be provoked and minimized.*

In 1991, just as he was beginning to study stigmatization, Steele moved from Michigan to Stanford. His new research partner was a Princeton Ph.D. named Joshua Aronson. Together, Steele and Aronson tried to answer the question of whether all minorities (including "strong," motivated black students) were vulnerable to stigma pressure. They organized an experiment for black and white Stanford students, such that the students would be given a difficult verbal reasoning test. White students did significantly better on the test than black students, even controlling for grades and SAT scores.

*Steele and Aronson turned from studying the effect of stereotyping on women to studying it in black students at one of the nation's most prestigious universities. As with his previous studies, Steele began by measuring the extent of the problem—i.e., the extent of black students' underperformance.*

Aronson and Steele's findings posed new questions about why black students often underperformed. Steele proposed a novel way to lessen the stigma pressure of the exam: by telling the students that their exam was a "task" that specifically didn't measure intelligence. This, Steele and Aronson reasoned, would reduce the overall stigma pressure. In the end, the results of the experiment showed that black students performed at the same high level as white students when stigma pressure was lessened.

*Steele and Aronson were still learning how to reduce the pressure of the stereotype threat, but they found a way to do so, with the encouraging result that black students matched white students' performance, strengthening the idea that stereotypes could be controlled by altering students' environment.*

Steele and Aronson could now conclude three things: 1) stigma pressure was general, in the sense that it applied to at least two groups, women and black people; 2) stigma pressure was strong enough to affect the test performances of even excellent students; 3) stigma pressure can be isolated and studied in a laboratory setting—in other words, experimenters can provoke it and minimize it with simple verbal cues.

*The results of Steele and Aronson's research painted a different picture of stereotyping than the ones common in social psychology at the time. Minorities' underperformance wasn't the result of genetic, biological factors, nor was it caused by unalterable feelings of inferiority. Instead, stereotyping could be "turned on and off" in the course of the same experiment.*

Moving forward, Aronson wanted to investigate the third conclusion of the experiment in more depth; he wanted to study what kinds of feelings stereotypes caused. He proposed asking black and white participants to rate the kinds of music they enjoyed, ranking their favorite and least favorite genres, immediately before taking a test. Aronson and Steele found that, when the test was presented to the subjects as measuring intellectual ability, black students were less likely to say they preferred traditionally black genres of music, such as jazz and hip-hop, but when the test *wasn't* presented as measuring intellectual ability at all, black students were *more* likely to say that they preferred these genres. Aronson and Steele interpreted their findings to suggest that black students were trying to avoid a stereotypical view of themselves, or "the spotlight of the negative group stereotype." Steele began to realize that black students were taking the test "under the weight of history."

*The black students involved with the study give different answers to the survey questions based on the state of mind they're in after taking the test. This illustrates an important concept in social psychology—the "operational definition." Steele doesn't have any way of understanding exactly what his subjects are thinking, but he can approximate their thoughts through the survey, advancing a makeshift, "operational' definition of their feelings of being stereotyped. Based on these results, Steele sees that black students' performances are impaired by stereotypes—but not in the uniform, unalterable way that previous social psychologists have described.*

Steele and Aronson's research suggested that black students of all kinds—not just poor students—were influenced by stigma pressure. Shortly after publishing the findings, Steele met with two students, Joseph Brown and Mikel Jollet. Joseph and Mikel proposed a question: Steele had studied elite Stanford students, but could he duplicate his findings in an inner-city Los Angeles school?

*After every experiment Steele conducts, he considers ways of replicating his findings for different identity groups. For the time being, however, he's restricted himself to studying test performance. This makes sense, because it's easier to control subjects' behavior and environment by proctoring a test—and therefore easier to see the relationship between environment and performance.*

Steele, Mikel, and Joseph proceeded to study stigmatization in the Los Angeles high school Mikel had attended. Mikel proctored a half-hour exam for black and white students. To provoke stigmatization, Mikel told half of the students that the test measured verbal ability; he told the other half that the test was "an instrument to study problem solving in general," which wasn't intended to measure individual students' abilities. Mikel also made a point of asking his subjects to complete a survey, in which they were asked how much they cared about school. In the end, Mikel found that black students who cared about school performed below white students when told that the test measured verbal ability. However, black students who said they didn't care about school were less likely to underperform—and black and white students who said they didn't care about school performed at the same level. The problem was, this was a consistently lower level.

*With each experiment Steele organizes, he gets a better sense for his subjects' thoughts and feelings during the study. Here, for example, Mikel improves on the results of Steele's previous study by measuring the relationship between academic motivation, academic performance, and stereotyping.*

Mikel's findings suggested that ambitious, academically gifted black students were *more* likely to suffer from stigma pressure than less academically gifted or ambitious students. Talented black students at Mikel's high school were like the Sonics in 1977—they had talent, but suffered from stereotype pressure. After Mikel's experiment, Steele began using the term "stereotype threat" to describe the impact of stigmatization on people.

*The experiment suggests that underperformance isn't necessarily a sign of laziness or lack of motivation—underperformance is in fact more apparent in the* most *ambitious, driven students, because these are the kinds of students who think about the threat of stereotypes the most.*

Steele had used social psychology to reach the conclusion that, contrary to what many people claim, universities and classrooms are different places for different people—different groups bring different mental and emotional baggage with them. But Steele's findings also needed further research: he wanted to understand the range of behaviors with which stereotyping could interfere. He also wanted to understand how the effects of stereotypes could be canceled out, or at least limited.

*As with his previous experiments, Steele's inner-city Los Angeles high school study points the way toward further research. In this way, Steele advances his knowledge of stereotype threats and comes to understand the phenomenon in much more detail.*

## CHAPTER 4

Several years ago, Steele read an article by Henry Louis Gates, the Harvard professor, about a man named Anatole Broyard, a contributor to the *New York Times* and the *New York Review of Books*. After Broyard died of cancer in 1990, it was revealed that both of his parents, and all of his ancestors as far back as the 1700s, were black. Broyard never revealed his black identity to his own children, and "passed" as white his entire life. Broyard's father had pretended to be white when he moved his family north in the 1920s, so that he could enter elite white unions.

*Here Steele gives Henry Louis Gates a "shout-out"—Gates was the professor who commissioned Steele to write the book* Whistling Vivaldi *in the first place. The racial politics of Broyard's life were hotly debated in the 1990s (and it's been suggested that Broyard inspired Philip Roth's 2000 book* The Human Stain, *although Roth has denied this).*

Broyard's first wife was black, but he later remarried a white woman. Afterwards, he became a professor at the New School and New York University. As a "white" man, Broyard had different access than he would have had as a black man in the 1950s: his children could go to better schools, his family could live in better neighborhoods, and he was allowed to write about subjects he wouldn't otherwise have been assigned.

*Much like his father before him, Broyard seems to have adopted a white identity (because he could—he looked white enough to "pass") in order to gain material advantages in life—to give himself more writing opportunities, and to give his family better education and social status.*

Broyard's life is proof that one's racial identity isn't necessarily the result of inborn qualities. Rather, it's the result of identity contingencies—the responses that one gets from the world, and the external conditions one must take into account to function. After beginning to "pass" as white, Broyard traded one set of identity contingencies for another.

*In Steele's terminology, Broyard's actions illustrate the subtleties of identity contingencies. By pretending to be white, Broyard altered people's expectations of his behavior, and acquired new contingencies for his identity.*

The term "contingencies" has been a fixture of behavioral psychology for many decades. There are different kinds of contingencies—in other words, different ways to classify "the conditions you have to deal with in a setting in order to function in it." One way is to classify these contingencies by identity. Women may provoke different social responses than men, even when they're doing exactly the same thing. Often, people of different races know the contingencies associated with their races. For example, black students might think that, if they sit with white students at lunch, other black students will think they're disloyal or "wanting to be white." The possibility of this reaction is one contingency these black students must deal with when they go to sit down for lunch.

*Steele has been discussing contingencies in one form or another throughout this book. Brent Staples' experiences in Chicago illustrate the racist contingencies associated with being a black man in a big American city: white people consider him to be dangerous. Steele's point, however, is that all identities have contingencies, and that all identity group's contingencies are equally strong, even if they take very different forms.*

As Steele proceeded with his research in the nineties, it occurred to him that all the contingencies he'd been studying were negative—for example, women responded strongly to the negative stereotype that women aren't good at math. Furthermore, Steele had been studying identity contingencies that threatened or restricted behavior in some way.

*It's been suggested that negative stimuli are more memorable than positive stimuli, and Steele's research so far seems to confirm this possibility.*

After giving a lecture at Radcliffe College, Steele received an email from a graduate student who argued that mental health should be included in Steele's list of identities, along with race, age, and gender. Furthermore, the graduate suggested to Steele that not all identity contingencies manifested themselves in the form of a particular threat. Instead, someone with bipolar disorder (like this graduate student) lives with a constant sense that something bad could happen as a result of her condition. The threat is "diffuse," rather than focused.

*Steele's research is centered around the idea that stereotype threats can be elicited or silenced at specific times. However, the Radcliffe student suggests a different possibility—that some threats are more uniform and uncontrollable (a position close to the one advanced by social psychologists before the 1980s, but regarding different issues).*

Amin Maalouf is a French essayist and novelist. He was born in Lebanon, but studied at a French Jesuit school. He wrote a book called *In the Name of Identity: Violence and the Need to Belong*, about the crimes committed in the name of identity. Maalouf's book prefigured Steele's own research: like Steele, Maalouf argued that threats tend to make identity "prominent in one's feeling and thinking." Put another way, Maalouf argues that one's sense of a social identity usually arises from responding to identity contingencies, most of which take the form of a threat. Thus, Steele first became strongly aware of his blackness while learning that he wasn't allowed to go to the **swimming pool**—a textbook threat contingency.

*Maalouf's writing confirms an idea that Steele has been taking for granted throughout the book so far: threats are more powerful motivators than rewards. Whether in school or in real life, people tend to respond to pain more than pleasure. Thus, it makes sense that people's awareness of their identity contingencies grows as they experience negative outcomes of some kind.*

Even if negative contingencies play the biggest role in reinforcing identity, there are neutral and positive identity contingencies, too. Going to the men's bathroom is such a routine, non-stigmatized part of people's lives that it counts as a neutral contingency (as long as one is comfortable with one's gender identity). Positive contingencies also reinforce identity, but they're often less memorable than negative contingencies. For example, if Steele were chosen first on a basketball team (reinforcing the positive stereotype that black people are good at basketball) he might not even notice. In short, "even the most minimal identity threats are enough to make us think and behave like a group member."

*Steele isn't saying that all identity contingencies are negative—rather, he's suggesting that negative identity contingencies tend to be stronger and more memorable than positive or neutral contingencies.*

In 1969, Steele taught at the University of Bristol. During this period, the social psychologist Henri Tajfel conducted an experiment in which boys were asked to estimate the number of dots in a drawing. Then they were divided into two groups, based on whether they were "over-estimators" or "under-estimators." Finally, the boys were asked to allocate sums of money to other boys. The study found that the boys were more likely to favor people in their own "estimator" group—"They discriminated in favor of even this minimal identity." In a similar study, boys were divided up based on whether they preferred one of two paintings. Once again, the boys favored the people in their group. The results of this study have been replicated hundreds of times, suggesting that people are subject to the "minimal group effect," as it's now called.

*Tajfel's study echoes the results of Jane Elliott's classroom exercise from the late 1960s: even the most minimally defined groups will tend to favor their own interests over the interests of other groups. This is a surprising conclusion, because the group identities Tajfel creates for his experiment are relatively meaningless, and furthermore had only been created in the process of that same study. In all, Tajfel's research suggests two things. First, if even minimal group identity can provoke such strong feelings in an experiment, than a strong group identity (such as religion or race) must play a huge role in dictating a person's behavior. But second, if people's behavior can be manipulated so easily, then perhaps the influence of a group identity can also be neutralized or minimized.*

People seem to be hard-wired to discriminate on the basis of groups, even if these groups are more or less random. And if even the most minimally defined groups are enough to trigger discrimination, then perhaps even the most trivial forms of identity threats are enough to trigger some reaction.

*Steele's research and his colleagues' findings support the idea that small, almost subliminal triggers can cause underachievement on tests.*

Steele recently listened to an NPR interview on the subject of why so many notable African Americans have lived in Paris. An interviewee explained that in Paris, blackness means something very different than it does in America—the identity contingencies are different. The French are probably just as prejudiced as Americans, the interviewee went on, but they also have positive stereotypes for African Americans, romanticizing their music and literature. It occurred to Steele that adopted a new identity contingency can be liberating but also imprisoning—the longer one stays away from one's original identity contingency, the harder it is to return. This may be why Anatole Broyard never told his children about his race—he would have had to relearn an entirely different set of contingencies as a black man.

*Identity contingencies can be liberating but also imprisoning. Under the right circumstances, they provide individuals with positive cues from other people. However, these positive cues can be stifling and repetitive, particularly if the individual has "switched" from one identity to another. Steele doesn't claim to know what it must have been like for Broyard to hide his racial identity from his family, but he suggests that part of what would have made it so difficult to "come out" about it is that it would mean fundamentally switching identities—changing the way one interacts with the world.*

Social identities, Steele has come to believe, are "adaptations to the particular circumstances of our lives." Social identity is a way to square one's own being against that which society expects. Furthermore, the best way to change a person's social identity is to change social stimuli, not the person's values and attitudes.

*According to Steele's research, identity isn't an essential, inborn trait. For example, there's no such thing as an inherently "black" set of behaviors—the stereotype of these behaviors is the product of society's expectations for black people, and the ways black people respond to these expectations.*

## CHAPTER 5

Ted McDougal was a white student at an excellent university, taking an African American political science class. He noticed that he was one of two white students in the class. He also noticed that black students in the class used the word "we" a lot when discussing history, clearly not including him. McDougal found that he was expending more energy trying not to say the "wrong thing" in class than he was studying the material.

*Steele mentioned Ted in the first chapter of the book, arguing that Ted's behavior illustrated the relationship between individual behavior and social contingencies. This is a tricky example though, and it's important to understand that Steele isn't arguing for anything like "reverse racism." Ted doesn't experience racism or oppression because of his whiteness in his daily life or on a social or legal level, but in the specific environment of this class his behavior was affected by the fact that he was constantly made aware of his whiteness.*

Steele later spoke with McDougal. McDougal said that the class had taught him an important lesson: "smartness" is also the product of one's environment, not just one's cognitive abilities. Steele suggested that McDougal's caution in class had reduced his performance, and further suggested that he was experiencing threatening identity contingencies.

*Ted's behavior suggests that people of all identities can, under the right circumstances, have their cognitive abilities impaired by their awareness and fear of confirming a stereotype.*

Every group on the planet is stereotyped negatively in some way. In any situation in which that group feels the weight of a negative stereotype, their behavior is likely to change in measurable ways. However, in the early 1990s, Steele still lacked evidence that his findings for blacks and women could be generalized to apply to any identity group. He wanted to pursue two questions in particular: 1) would people who'd shown no previous signs of susceptibility to a stereotype be influenced by a stereotype threat?, and 2) could stereotype threat effects be measured in other groups, as well as blacks and women? Steele first decided to pursue the first question.

*As his research proceeds, Steele begins to adopt a fluid, environmental approach to identity and stereotyping. Building on Tajfel and Elliot's experiments, which suggested that new stereotypes or group identities could be created in mere hours, Steele wants to measure if people are susceptible to the threat of a stereotype of which they've only just been made aware.*

Steele collaborated with his colleagues and developed a measure for identity threats. High-performing, confident white math students would be pitted against Asian-American math students: white students would be given a test and told that Asian-Americans traditionally did better on the test. The beauty of the experiment was that it measured stereotype threats for people who'd rarely thought about that stereotype—in other words, it measured how white male students would perform when they were made aware of the stereotype that Asian-Americans were better at math. (While it could be objected that white students already knew about this stereotype, Steele reasons that positive stereotypes of another group wouldn't have a big impact on the white students' inferiority, especially since these were already confident, high-performing white male students.)

*Steele's assumption in this experiment is that white students wouldn't have devoted a lot of time to thinking about the stereotype that Asian-Americans are better at math than other races. While this seems like a somewhat dubious assumption, Steele argues that these particular white students hadn't interacted with many Asian-Americans, and therefore didn't think about the stereotype very often. In this way, Steele attempts to measure whether newly-fostered stereotypes can be as powerful as stereotypes that subjects have contemplated for their entire lives.*

The experiment suggested that gifted white math students underperformed on the test when they were told that Asian-Americans generally did better on the test. Around the same time, a Harvard study concluded that Asian women underperformed on math tests when reminded of their gender but did better when reminded of their race. The two experiments suggested that identity contingencies exerted a major influence on different identity groups' cognitive performance—even if the subjects hadn't experienced a lifetime of identity contingencies.

*Steele's experiment, along with another experiment, provides further evidence for the hypothesis that one's identity isn't a monolithic feeling that exerts an equal influence at all times. Rather, different facets of identity can become more or less influential according to environmental factors. This further suggests that, by changing environmental factors, people can reduce the influence of stereotype threats.*

Steele's next step was to gather further evidence of "the breadth of stereotype threat effects." By gathering this evidence, Steele was aiming to reinforce his position that behavior was as much a product of external social factors as it was a product of "internal susceptibility."

*The concept of "internal susceptibility" was at the core of the old interpretation of stereotyping—an interpretation which often devolved into victim blaming. If certain identity groups were especially susceptible to stereotyping, one could (and people did) argue, then they were also to blame for their own feelings of inferiority.*

The French social psychologist Jean-Claude Croizet has spent years conducting tests measuring the impact of stereotyping on the French working classes. His studies of French students mirror Steele's findings: working-class students did significantly worse on their tests if they were primed to think about the stereotype that working-class French people aren't as good at language ability. Other researchers in North Carolina in the early 1990s found similar results for elderly people and memory. In the years following Steele's groundbreaking research, social psychologists have replicated his findings for many different identities, on tests measuring many different abilities—everything from athletic prowess and reaction time performance to verbal reasoning and memory. Steele says he will now go on to address a question often asked in frustration: "why can't a person just buckle down and overcome the damn stereotype?"

*The psychological findings discussed in this section support the notion that stereotype threats aren't strongly associated with any one social group. Rather, stereotype threats can impact many different kinds of people's behavior under the right (or rather, the wrong) circumstances.*

## CHAPTER 6

The mathematician Philip Uri Treisman has developed workshops designed to help students overcome stereotypes. Years before, Treisman studied the way different racial groups learn mathematics. He found that white students studied more independently, and focused less of their social lives on academics, than Asian students, who helped each other and studied together. Black students were the most independent in their study habits, however—they studied for longer and made a point of isolating themselves when they worked. They also didn't talk as much about their academics, which made them less likely to realize that they weren't the only ones struggling with the material, and more likely to question whether they belonged in the class (or even the college—one student whose story Steele shares dropped out of Berkeley altogether). In short, Treisman found that black students were trying very hard to succeed, but were "trying to do it all by themselves" in a field where "pooling intellectual resources" was key.

*Research suggests that different racial groups—responding to different sets of identity contingencies—study in different ways. But certain ways of studying are more successful than others, especially in particular educational environments. Black students' general propensity for studying alone for long hours can be counterproductive, because it gives them the false impression that they're the only people who are having difficulty with the material, and therefore provokes the feeling that they're inadequate and don't deserve to be in school at all.*

Steele's close friend Carol Porter is a social psychologist at Princeton, and she's studied the ways different kinds of students study organic chemistry, traditionally one of the most difficult courses at Princeton. Many Princeton students will sit through the class twice—the first time just to learn, the second time for a grade. Other students try to take the class in a less competitive summer school, and then get the credit transferred. Porter has found that even when they are advised to do so, black students are considerably less likely to use either strategy—instead they "push on" and sit through the class once, for a grade, thus often getting a lower grade and jeopardizing their chances of getting into medical school later on.

*Further research supports the hypothesis that black students, largely as a result of their socially-determined identity contingencies, tend to "over-effort" in order to disprove negative stereotypes—but this "over-efforting" often leads to diminished performance in the end. This is an important idea because it could help explain the achievement gap between white and black students at elite universities.*

Steele collaborated with David Nussbaum, a graduate student, to study "over-effort" in a laboratory setting. Nussbaum and Steele developed an ingenious way to measure over-effort. Students would be asked to solve difficult anagram puzzles. Then they'd be asked to choose additional anagram problems to solve, and could pick how many they wanted to do. This was designed to measure students' drive to succeed—their desire to continue challenging themselves with difficult material, even after they'd failed to do well. The experiment showed that black students performed as well as white students, and chose as many additional problems, when the test was framed as just another test. But when the test was framed as a test of cognitive ability, black students chose significantly *more* anagram puzzles than white students. Like hardworking black students trying to overcome prejudice, the black subjects were pushing themselves harder, exemplifying over-effort.

*Nussbaum's study mirrors Treisman's findings by suggesting that black students push themselves too hard—at least partly because they feel that they have something to prove, and want to overcome the racist stereotype that they're mentally inferior to their classmates. The experiment further suggests that black students may be more academically successful when they relax more and don't push themselves so hard to prove stereotypes wrong.*

Minorities face many challenges in life, and often they're encouraged to work extra hard to overcome society's stereotypes—Jackie Robinson is the perfect example. This extra motivation for minorities—breaking the stereotype—isn't necessarily good or bad, Steele claims. It can inspire people to work harder, but it can also interfere with their confidence and concentration.

*Jackie Robinson was the first black baseball player to break the "color barrier" in professional baseball. Robinson is often considered a model for how minorities can succeed through hard work and extra perseverance. Steele's point is that, while Robinson's achievement is extremely impressive, the extra challenge of overcoming society's prejudices usually* doesn't *inspire minorities to succeed—rather, it just gives them an extra source of stress, frustration, and self-doubt.*

Steele then asks a new question. The previous studies he's referenced have had to do with "work at the frontier of a person's skills"—but how do stereotype threats affect people when they're doing work that is at a lower level, or that they're very comfortable with? A study at the University of Kansas aimed to measure how the "breaking a stereotype" motive affected people's performance at both upper and lower levels of work. Students were given two math tests, one easy and one difficult. One group took the tests under a stereotype threat about women, while others took the tests under a mitigated stereotype threat. The results showed that women did considerably worse on the *difficult* test while under a stereotype threat—but significantly better on the *easier* test. The stereotype threat was apparently enough to distract them slightly on the hard problems, but enough to drive them to greater success on the easier ones.

*This study adds nuance to Steele's findings, and shows that at some levels, "pushing on" to disprove a stereotype can actually help improve performance. This complicates things, though, when one reaches the "frontier" of one's skills—then the stereotype threat is much more of a hindrance than a help.*

The motive to disprove a stereotype can turn people from a stereotyped group into overachievers—it gives them drive to succeed, where other groups of people feel no incentive to work hard. However, this extra drive to succeed isn't always good. It may cause extra stress, for example, which can interfere with performance—and it's just exhausting to have to be constantly working to disprove a stereotype. This shouldn't suggest that there's no point in trying hard, Steele says, but it's a fact that "ease of performance" is an important factor in succeeding in a great many fields—therefore, the attempt to break a stereotype can impede ease of performance, and therefore success.

*Steele acknowledges that wanting to succeed in the face of prejudice can, by itself, motivate people to succeed where they otherwise wouldn't have been able to summon the drive. In general, however, this motive also acts as an obstacle to success, because it causes people from underrepresented groups to because frustrated and exhausted. And, of course, we usually only see examples of shining successes—those who overcame great odds—but not the many others who were worn down or sabotaged by trying to overcome those same odds.*

Treisman's workshops are designed to correct for black students' tendencies to "commit to self-sufficiency"—he essentially has black students study more like the Asian students he researched, and do work in groups and help each other. His research, and that of other psychologists, has shown that the conventional wisdom may be wrong. Working extra hard to overcome a stereotype can be inspiring, but it may also be counterproductive, because it limits people's success, and causes them to blame themselves for their failures.

*Treisman summarizes the point Steele has been making thus far: overall, over-effort in order to combat a stereotype leads to more failure than success. This idea has larger social ramifications as well—going against (or at least adding nuance to) a general American ideal that the harder one works and the more obstacles one overcomes, the more deserving and successful one will inherently be.*

## CHAPTER 7

The social psychologists Donald Dutton and Arthur Aron conducted an experiment in which they asked male students to walk across a narrow, rickety bridge. Then, each student completed a questionnaire with an attractive female interviewer, who then gave the student her phone number and invited him to call her if he had any questions. Aron and Dutton were trying to measure if the students would mistake their own anxiety while crossing the bridge for attraction to the interviewer. They found that students who'd just crossed the scary bridge were likelier to call the interviewer than students who took the questionnaire after crossing a lower, more stable bridge, or who were met by a *male* interviewer after crossing the scary bridge. This suggests that people can't always make sense of their own emotions—they confuse one emotion for another.

*In this chapter, Steele explores the relationship between subjects' emotions and their impressions of their own emotions. As Dutton and Aron's experiment suggests, people can't always describe their own emotions accurately—sometimes, indeed, they confuse one emotion with another (in this case, they confuse anxiety with sexual attraction). This might be because of several reasons, but one is that the physical symptoms of many differing emotions are actually quite similar.*

Steele and his colleagues ran into a similar problem when measuring identity threats—people can't always understand their own emotions. In their previous tests with black students and stereotype threats, the students didn't report feeling anxiety—even though their actions (filling in words reflecting the negative stereotype, choosing "whiter" interests over "blacker" ones, etc.) suggested that they were indeed feeling anxiety. As Aron and Dutton's research suggests, it might just be that they didn't *know* they were feeling anxiety.

*Dutton and Aron's findings illustrate the difficulty of measuring something as subjective stereotype threats. Even if people are experiencing stereotype threats, they might not be aware of it.*

Steele collaborated with a team of researchers from Santa Barbara to measure the physiological components of anxiety, such as blood pressure, in conjunction with stereotype threats. For this experiment, black and white students' heart rate and blood pressure were recorded, and then they took a test—with half of them receiving cues designed to evoke stereotypes. Then the students were examined once again. The experiment concluded that black students' blood pressure dropped when they were told that their test was "race fair." White students' blood pressure dropped when they were told that the test measured intelligence. Thus part of the impact of a stereotype threat was physical: it changed people's blood pressure and heart rate. Another study showed that this physiological proof of anxiety could be created simply by the anticipation of a stereotype threat—by showing that women did worse on handwriting exercises if they knew that a difficult math test would follow.

*In spite of the difficulty of measuring stereotype threats, Steele found physiological evidence—an important quantitative way to verify his results. Even if the subjects involved in the experiment didn't realize that they were experiencing anxiety, the physiological data told a different story.*

Steele's next step was to study the impact that stereotype threats had on mental faculties. Already, Jean-Claude Croizet had conducted important experiments to measure this phenomenon. Croizet knew that there is a strong correlation between the regularity of the heartbeat and the "cognitive load." In other words, when people think hard, the interval between their heartbeats tends to be more regular. With this in mind, Croizet administered tests that pitted psychology majors against "hard science" majors, referencing his university's stereotype that science majors were smarter than psychology majors. Croizet found that psychology majors scored lower than hard science majors when the test was presented as an IQ test, but not when the test was presented as "non-diagnostic of intelligence." Interestingly, when psychology majors taking the "intelligence test" thought harder (as measured by the regularity of their heartbeats), they did worse—but when science majors thought harder, they did *better*. In other words, hard science majors, free from stereotyping pressure, were able to focus almost all of their hard thinking on the test. Psychology majors thought just as hard, but seemed to "waste" some of their concentration on the stereotype threat, rather than the test.

*Croizet's research illustrates some strengths and weaknesses of behavioral psychology. Psychological experimenters have no way of understanding exactly what their test subjects are thinking, so they have to devise ways of approximating their subjects' thoughts. In this case, for example, Croizet was able to get a rough sense his subjects' level of concentration by measuring their heart rate. Croizet's findings support the notion that stereotype threats interfere with a subject's ability to concentrate fully on completing an exam. This again helps explain the achievement gap between white students and students from minority groups—the latter group has to contend with more stereotype threats distracting them.*

Steele interprets Croizet's findings to suggest that stereotyping can impede mental faculties. When people face stereotyping, their minds race, and they can't concentrate on cognitive challenges. Researchers at the University of Arizona have found that the stereotyped, "racing mind" has three qualities: 1) vigilance regarding the stereotype, 2) self-doubt, and 3) constant self-monitoring of one's behavior. Later on, researchers used fMRI technology to scan the brains of female math students subjected to stereotype threats while they were taking a math test. The scans suggested that women's mental activity in the part of the brain associated with mathematics was reduced as a consequence of the stereotype threat—but activity in the part of the brain associated with "vigilance to one's social context and to emotion" was *heightened*.

*Further experiments strengthen the case for physiological evidence of stereotyping anxiety. Once again we see that the added challenge of thinking about the stereotype associated with one's group, particularly if the stereotype is negative, distracts test-takers from concentrating on the test itself. The women in the fMRI scanner were thinking very hard, but they were wasting a lot of this brainwork on the stereotype threat instead of the math problems at hand.*

When people feel that they're being stereotyped, or in danger of confirming a stereotype, their minds race, their blood pressure rises, and they perspire. Furthermore, they might not even be aware that they're experiencing this kind of anxiety. But in the mid-1990s, Steele still had another question: "Is there any evidence of what long-term exposure to identity threats does to people?"

*So far, Steele has been studying the impact of stereotype threats in controlled, short-term environments (classrooms). But now, he wants to apply his research to different settings, over a longer period of time.*

Sherman James, an epidemiologist, grew up in South Carolina and received his Ph.D. from Washington University. He later taught at the University of North Carolina, where his research focused on racial disparities in health, especially the high rates of hypertension in the black community. James interviewed a black hypertension victim named John Henry Martin. Martin had grown up brutally poor and had gradually worked his way to success, but then suffered from hypertension and ulcers at an early age. Martin's name (and his life story) reminded James of the folk legend of **John Henry**, a railway worker who was challenged to drive railroad spikes faster than a new spike-driving machine, defeated the machine, and died from exhaustion as a result. James began to think of the John Henry legend as a metaphor for hypertension. Just as John Henry tried to defeat the machine, John Henry Martin, James now opined, had spent a lifetime trying to run away from black stereotypes—and though he had largely succeeded, his health had suffered as a result.

*Sherman James's research further strengthens the case for physiological evidence of stereotyping anxiety. Martin's lifelong hypertension, it could be argued, reflects the added anxiety he had to deal with as a result of being a poor black man in an often racist country. This added anxiety would explain why black people tend to suffer from hypertension to a greater degree than white people—it's not a result of their genes, but rather a result of their accumulated social experiences.*

James began to test his hypothesis among black men in South Carolina. He found that there was a noticeable positive correlation in the black community between hypertension rates, ambition, and awareness of stereotypes. Ambitious black people were much more likely to suffer from hypertension than white people who reported the same level of ambition.

*James's research reflects Mikel's findings in inner-city Los Angeles schools: the most motivated, hard-working black people are also the most likely to suffer, both physically and mentally, from the "cloud" of stereotypes and identity contingencies.*

The implication of the research Steele has discussed in this chapter is disturbing: wanting to succeed and caring deeply about success has a heavy price. The pressure to succeed can cause health problems and impair mental faculties. If society is to reduce this problem, people first need to understand the scope of identity pressure—a topic that Steele will explore in the following chapter.

*The bitter irony of Steele's findings is that, while minorities have been accused of underperforming because they're lazy or inferior to white people, the reality is that sometimes they underperform precisely because they're so talented, motivated, and ambitious.*

## CHAPTER 8

In June 23, 2003, the Supreme Court ruled on two affirmative action cases. Shortly before the rulings, NPR interviewed Justice Sandra Day O'Connor. Curiously, affirmative action never came up in the interview. Instead, the interviewer asked O'Connor about her role as the only woman on the court (later, she was joined by Justice Ruth Bader Ginsburg). Connor talked about how, when Ginsburg joined her, different things were expected from her. She no longer stressed as much about making the right choice "for women." After O'Connor retired, and Ginsburg briefly became the only female justice, Ginsburg made comments suggesting that she felt "burdened with extra scrutiny."

*Sandra Day O'Connor was the first woman on the Supreme Court, and she reported feeling anxious and stigmatized as a result. By virtue of being the only woman on the court, O'Connor felt that she was being asked to speak on behalf of all women, and thus began questioning her own decisions more than she would have otherwise. O'Connor's behavior mirrors that of the test-takers in some of Steele's experiments—they feel burdened by the extra pressure of their minority status.*

Essentially, Ginsburg and O'Connor were describing identity contingencies. With two female justices on the court, Ginsburg and O'Connor gained enough "critical mass" to circumvent the extra scrutiny of their peers. Psychologists have studied the concept of critical mass in many different settings. From their perspective, critical mass is defined as "the point at which there are enough minorities in a setting … that individual minorities no longer feel uncomfortable there because they are minorities." For example, studies have shown that when the number of women in an orchestra approached forty percent, the women no longer feel as stressed and stigmatized—suggesting that forty percent is the "critical mass" for an orchestra.

*The concept of critical mass is important, because it suggests the ways in which 1) small environmental cues can add up to provoke a strong sense of stigmatization, and 2) small environmental cues (such as hiring more women for an orchestra) can cancel out the sense of stigmatization.*

In the 1990s, Steele researched the factors that lead to a person being affected by identity threats. Initially, he believed that psychological factors, such as confidence, were most relevant. But over time, he began to realize that often, the people who were most confident—such as O'Connor—suffered from identity threats the most. Steele began to understand that environmental factors were just as important in predicting people's responses to identity threats. Steele assumed that environmental cues, some of them almost undetectable, have a discernible influence on people's behavior.

*By the 1990s, Steele has assembled a convincing case for the impact of environmental factors on the individual's sense of stigmatization. However, Steele doesn't discount the role of the individual's personality: he's found that the most driven, motivated people are often most susceptible to stereotyping cues. In this sense, stereotype threats arise from an intermingling of environmental and personal factors.*

Steele and his research partners began to develop a theory of how environmental cues contribute to identity threats. It seemed that "identity cues" tended to influence people's behavior when they accumulated over time. Individual identity cues, however, didn't necessarily impact behavior. By "identity cues," Steele means external stimuli that remind people of an identity stereotype. Many of these stimuli exist regardless of whether or not people are actively prejudiced. For example, when O'Connor was the only woman on the court, she wasn't reacting to overt displays of prejudice; rather, she was reacting to the number of male justices itself. Steele posits that identity cues must gather a certain "critical mass" in order to influence people's cognitive processes.

*Steele has shown how minor, seemingly neutral verbal or visual cues can provoke feelings of stereotype anxiety in test-takers. However, here he begins to develop a more nuanced theory for how and why this happens. He suggests that a certain number of minor stereotyping cues, when put together, can trigger an anxious reaction that impedes the test-taker's cognitive abilities.*

At this point in his research, Steele had many new questions about identity contingencies, above all, "Can a few cues in a setting really undermine a person's sense of belonging? Are people so attuned to the details of their social environments?" Working with three colleagues, Valerie Purdie-Vaughs, Paul Davies, and Mary Murphy, Steele developed experiments designed to measure the influence of environmental cues on behavior. Davies, working with Steve Spencer, ran an experiment in which students were asked to watch TV commercials, some of which depicted women in stereotypically gendered roles. Then they were asked to complete a test. The experiment suggested that women exposed to gender-neutral TV were likely to perform at the same level as the men, but when they watched women in stereotypical roles, they underperformed.

*In this situation, a seemingly minor identity cue—a TV commercial with sexist content—provides enough of an identity threat to elicit strong feelings of inferiority and self-doubt in the female test-takers. In this case, the female test-takers' lifelong experiences with sexism and misogyny have influenced them in such a way that even something as simple as a commercial is enough to interfere with their cognitive performance on the test.*

Steele and Purdie-Vaughns developed their own experiment, in which black and white participants were given a newsletter, supposedly from a tech company, and then asked if they'd trust the company. Some copies of the newsletter included photographs showing a small number of black people at the company, while other copies showed larger numbers of black employees. Some copies specified that the company had a "color-blind" hiring policy, while other copies said the company valued diversity. White participants said they trusted the company no matter which version of the newsletter they read. Black participants were much more likely to say they trusted the company if they saw pictures of many black people, regardless of what the company's diversity policy was. But they were also more likely to say they'd trust the company that valued diversity, even if there were fewer black people in the pictures.

*This experiment provides more nuanced results than the experiment discussed in the previous section. Certain identity cues are powerful enough to provoke strong feelings in the test subjects, but other identity cues are less powerful, with the result that they can be masked or canceled out by other, contradictory identity cues. For example, the statement that the business values diversity, it would seem, is enough to neutralize the dearth of black people in the photographs from the business newsletter (at least at the time this study took place—"diversity" has recently become more of an empty buzzword that many minorities are, for good reason, suspicious of).*

The results of the experiment might suggest that people with minority identities feel more comfortable when they see other minorities (i.e., the critical mass approach), but also when they understand that their teachers or employers value diversity. But the results further suggest that certain environmental cues (such as photographs of minorities) can "cancel out" others. Even if it's impossible to control every detail of an environment, such as a classroom, psychologists' research could be used to create enough positive cues that people feel relaxed and un-stigmatized.

*The experiment sets the tone for the final third of* Whistling Vivaldi, *which is largely about ways of neutralizing stereotype cues. No environment can be controlled with total accuracy, but perhaps certain environments, such as classrooms, can be primed to limit the influence of stereotyping and thus maximize the potential of all students.*

Mary Murphy proposed that the researchers study the physiological impact of identity cues in everyday situations (rather than during a test). With the help of James Gross, an emotional psychologist, Steele and Murphy developed experiments to measure the physiological impact of situational cues. Student participants watched a video advertising a science conference, and their heart rates were recorded. Some students watched a video showing more men than women at the conference, while others saw a video with equal numbers of men and women. Men who watched the videos showed little change in heart rate. Women, however, experienced an elevated heart rate while watching the video with more men than women, and also remembered more "incidental features," showing heightened vigilance.

*Murphy, Gross, and Steele's findings further reinforce the physiological basis for identity threats—and, therefore, the need to find ways to control environments and limit the influence of these identity threats. Without some kind of environmental control, Steele suggests, underrepresented groups, such as women, will continue to experience anxiety and underperform on tests, and perhaps in general.*

Murphy, Steele, and Gross had shown that, under ordinary circumstances—something as banal as watching a commercial—women experienced an identity threat. This supported the hypothesis that 1) responses to identity threats were largely the result of environmental cues, rather than psychological disposition, and 2) it might be possible to neutralize these environmental cues with other cues.

*After many years of research, Steele and his colleagues have uncovered a major source of the achievement gap problem (feelings of anxiety, caused by environmental cues and proven with physiological evidence) and, by the same token, proposed a possible solution (changing and neutralizing stereotype threats through different environmental cues).*

## CHAPTER 9

In 1967, Steele began graduate school in social psychology at Ohio State University. Like every other graduate student, he was very intimidated. He was also the only black student in his program, and as a result, he had an "extra layer of concern." He sometimes felt as if he didn't belong in the program at all—a thought that occurs to almost every graduate student, sooner or later, but one that Steel believes he had particularly often because of his racial isolation. Steele liked and respected his classmates and professors in graduate school, and felt that his peers were being very supportive. But he continued to feel a strong sense that he didn't belong.

*Steele strengthens his arguments by citing examples from his own personal experience. As a black student in a predominately white academic environment, Steele felt considerable anxiety and unease—which surely affected his academic performance in at least some way.*

Before Steele talks about what can be done to fix the problem of stigmatization at schools, he wants to show how pervasive this problem really is. In 1988, a man named Bill Bowen became the president of the Andrew Mellon Foundation, and launched a study that examined groups of students from elite schools, including many students admitted through affirmative action programs. Bowen also presided over another study, conducted by the sociologists Elinor Barber and Stephen Cole, designed to measure how students' identities shaped their college experiences. Students' grades were measured, along with their race and class, and they were interviewed every spring through their junior year. The study provided evidence that identity threats acted as a barrier to success for many different minorities.

*It's crucial to notice how recent a lot of the research into the achievement gap is: it's only within the last thirty or forty years that organizations like the Andrew Mellon Foundation have compiled authoritative data on the academic performances of students from a minority background. This would explain why Steele's research is still considered so radical in some circles—the research is relatively new, so social psychologists' interpretations of the data have yet to catch on.*

While Steele was in graduate school, his adviser was a man named Thomas Ostrom. While Steele faced a lot of identity cues—such as constant mentions of who in his program was "smart," and a professor who used the "N" word in class, his relationship with Ostrom was an important factor in neutralizing these negative cues. Ostrom treated Steele like an equal partner in their work, and held him to high standards.

*Steele experiences identity cues, even though he doesn't mention any explicitly racist people (with the exception of his professor who uses the "N" word—why he does so is never explained). This reiterates the point that stereotype threats persist even in the absence of individuals expressing bigotry or prejudice of some kind.*

Years later, a graduate student named Geoffrey Cohen tested the effectiveness of mentors working with minority students. Cohen was interested in answering the question, "How does a white teacher give critical feedback to a black student so that the feedback is trusted and motivating?" Cohen organized an experiment that involved black and white Stanford students writing an essay about their favorite teacher. The students were invited back, two days later, to receive feedback on their writing. A white professor offered each student feedback in one of three ways: 1) starting with praise and then providing feedback, 2) trying to be fair and neutral, or 3) using high standards to judge the essay, but stressing that the essay *could* meet those standards with extra work. Black students were most receptive to the third style. This was the kind of feedback that Ostrom gave Steele years ago—making him feel like he belonged in a demanding environment.

*Cohen's research was a milestone in the study of how to neutralize the impact of identity cues. By determining that there are forms of feedback that don't alienate (and in fact affirm) black students, Cohen was able to show that black students could live up to their potential in an academic atmosphere, rather than being crushed under the weight of identity threats in a white-dominated environment.*

Why was the third form of feedback so effective for black students? It emphasized that the professor didn't think the student was stupid, because the professor was using high standards. It also showed respect for the student, since the professor stressed that he believed the student was *capable* of meeting high standards. Steele now wanted to test the strength of the third form of feedback in other settings.

*Rigorous but encouraging feedback can be a powerful force for helping black students succeed in academia—and, in general, this form of feedback can be useful in canceling out some of the most pervasive and damaging identity threats.*

Steele began to study the experiments of a young professor named Greg Walton, who studied under Geoffrey Cohen. Walton wanted to study ways of helping minority students feel more positively about their college experiences. In the experiment he ran, the results suggested that black freshmen who were given a "narrative intervention" did measurably better in their next semester than black freshmen who didn't. By "narrative intervention," Walton meant showing the students survey results from past black students at the college. The surveys emphasized that the frustration and anxiety the black freshmen were feeling was natural for all freshmen, and would gradually vanish over the next three years—as previous black students had felt similar frustrations, but went on to find a sense of belonging.

*Walton's experiments into narrative intervention are important because they show how simple, easily implemented strategies can improve minority students' performance for months to come. One problem with using these strategies in a real, non-experimental setting, however, is that narrative intervention would seem to be most effective when minority students don't realize they're receiving it at all—for example, in Walton's study, the black freshmen probably aren't explicitly told that the experiment measures their receptiveness to encouragement.*

Steele later ran a similar experiment in which freshmen were asked to participate in late-night "bull sessions" with other students—just sitting and talking about personal topics. Black students who participated in these sessions were found to achieve higher grades than those who didn't. Steele hypothesizes that the black students who participated in the sessions did better because they came to realize that their problems weren't unique, and therefore that they weren't inferior to their peers.

*Simple, brief affirmation sessions have a huge impact on students' confidence and, it would appear, their academic success. But again, Steele doesn't discuss—yet—how one would implement these strategies in real life; it's not clear how one would encourage the whole student body to engage in effective "bull sessions."*

Recently, Joshua Aronson, Carrie Fried, and Catherine Good conducted a study in which black and white Stanford students were asked to write letters to minority elementary school students in nearby schools. The Stanford students were given information about the flexibility of intelligence, and then instructed to write an encouraging "narrative" about intelligence in their letters, arguing that the elementary school students could expand their intelligence with hard work and perseverance. On average, white students who wrote these letters experienced no change in their GPAs in the following semester, but black students on average improved their grades by a third of a letter.

*The study suggests that affirmation can exert a measurable, positive influence on students' grades—but once again, Steele doesn't describe how these measures could exist outside the confines of an experimental setting. The experiment is blind—i.e., the students don't realize why they're being asked to write a letter—and so it's not clear if the students would experience the same results if they knew that they were being trained in self-affirmation.*

Aronson, Fried, and Good's experiment had been conducted on excellent students, studying at one of the country's elite universities. Steele wanted to study the impact of education narratives on less intellectually gifted people, and also on younger people. He studied psychology experiments suggesting that environmental cues could impair the abilities of children as young as five years old. This would suggest that stereotyping could have a cumulative impact: in other words, if children grow up surrounded by stereotypes about their own identities, then they may alter their behavior in increasingly large ways.

*The experiences a young child has in a classroom can lead to major effects later on in life. For example, a child who suffers from stereotype anxiety might train themselves to ignore certain opportunities for success, meaning that the child misses out on chances for success later in life.*

Geoffrey Cohen, Joshua Aronson, Catherine Good, and a professor named Julio Garcia worked together to design a new experiment. Garcia had studied self-affirmation theory—the theory that people want to perceive themselves as being good and competent, and that when anything happens to interfere with their self-image, they struggle to repair it. Garcia hypothesized that giving ability-stereotyped students "a chance to develop a self-affirming narrative" would reduce the threat they felt in school.

*Garcia's hypothesis reflects the results of the last two or three experiments that Steele has described in the chapter: there appears to be a strong correlation between the use of affirmative techniques and academic performance.*

In Hartford, Connecticut, the psychologists introduced an experiment in seventh-grade classes. They asked teachers to give half of their students envelopes with their names written on them, and to ask the students to write down important values in their lives (for example, religion or family), along with an explanation of why these values were important. The other students in the class were asked to write down their least important values, and why *other people* might find them important. This second group of students thus never got the chance to develop a self-affirming narrative. The exercise—which only happened once at the beginning of the year—seems to have caused a noticeable improvement in the grades of black students who wrote about their values, with the exception of black students who were already academically successful.

*The findings of the experiment confirm Garcia's initial hypothesis. Students who celebrate their values—and, by the same token, construct a self-affirming narrative—tend to go on to do better in school than students who don't. It might seem unbelievable that something as simple as writing down one's values once at the beginning of the year can have such a large impact on academic success. But perhaps this is because human beings tend to overestimate the importance of their own individual autonomy and freedom.*

Many other psychologists were skeptical of the results of the experiment—it seemed almost impossible that one fifteen-minute exercise could so greatly improve academic success. But Garcia, Aronson, Good, and Cohen argued that this was exactly what had happened. They argued that 1) self-affirmation (in this case, writing a letter about one's values) is a powerful way to reduce the impact of identity cues, and 2) a simple fifteen-minute exercise causes a chain reaction: self-affirmation causes more success early on, which in turn inspires the students to continue ignoring negative identity cues and succeeding in class throughout the year.

*The psychologists' analysis further explains why a seemingly trivial exercise can have a large impact on academic performance for the entire year: the trivial exercise causes short-term improvement, which in turn causes further improvement for the rest of the year.*

Shortly afterwards, Catherine Good and Joshua Aronson tested whether certain forms of coaching could improve ability-stereotyped students' performances. They took a group of minority junior high school students living in Texas and assigned them mentors, some of whom stressed that intelligence could be expanded with hard work, and the rest of whom stressed the importance of avoiding drug use. The study found that students who'd received the former kind of mentoring performed noticeably better on their statewide tests for the year—particularly girls in math.

*The experiment upholds the other results discussed in the chapter: self-affirmation and an emphasis on values and goals leads to a noticeable improvement on tests.*

There are various techniques that reduce the influence of stereotyping cues: these techniques include affirmation narratives and incremental mindsets. Steele now wanted to study the techniques used by teachers who were said to be particularly good with minority students. Steele's wife, Dr. Dorothy Steele, organized an ambitious, open-ended study: researchers would observe teachers in their classrooms and try to learn as much as possible about their "classroom culture." Observers sat in on classrooms in almost a hundred different elementary schools in Virginia. The observers noted that often, the most successful teachers used "skill, warmth, and availability," and made a point of acknowledging the students' diversity and constructing lessons around that diversity, instead of using a "color-blind" approach.

*While Steele is very thorough in studying the positive impact of self-affirmation on academic performance, he also suggests that much more research is needed. It's unclear from the Virginia observers' notes whether there are teaching techniques that anyone can use to help minority students, or whether different teachers have different, unique styles that can't be replicated easily. And again, it's not clear if self-affirmation exercises need to be "blind," as they are in most of the experiments discussed in the chapter, or if the students involved will get the same results if they're aware of why they're being asked to affirm their values and goals.*

The research that Steele has talked about in this chapter points to optimistic conclusions. It suggests that simple measures can help students overcome identity cues in the classroom. It's important to understand that not all of minority students' learning deficits can be solved with affirmation exercises. Students without the educational background of their peers need extra education—not just affirmation. Nevertheless, Steele and his colleagues' research suggests that, even if concrete socioeconomic differences can't be corrected in the classroom, they can be minimized in practice. Steele makes an analogy: even if long-term causes of heart disease, such as overeating, can't be averted overnight, doctors can help patients by treating the immediate symptoms of heart disease, such as blocked arteries. The same is true of racial and socioeconomic prejudices: teachers can't remove these differences, but they can neutralize the most immediate symptoms of these differences.

*Steele brings the chapter to an optimistic conclusion. Even if additional research is needed, it would seem that educators can solve some underachievement problems by encouraging students—particularly minority students, who might be dealing with stereotype anxiety—to focus on self-improvement and positive values. Steele is careful to note that he's not suggesting that policymakers shouldn't focus on combating the fundamental causes of societal inequalities. Rather, Steele believes that educators and policymakers should try to treat both the immediate and the fundamental symptoms of the problem.*

Greg Walton and Steve Spencer returned to Steele's original question of why minorities underperform academically, and synthesized all this research into a choice between two hypothetical scenarios: both involving a black student taking the SAT, applying for college, and going through college. In both scenarios the student underperforms on the SAT but still gets into college, but then goes on to further underperform in college—the difference is that the cause of the first scenario is lack of motivation or work ethic, and the second is caused by compounding identity threats. Walton and Spencer hypothesized that the second scenario was the correct one. Their extensive study measured minority students' SAT scores, put some of these students through an intervention program designed to reduce the influence of stereotypes, and then measured the students' college grades. They found that stereotyped students who went through the program went on to get better grades than non-stereotyped students with equal test scores. In other words, the second scenario was proved resoundingly correct.

*Walton and Spencer's research further confirms the hypothesis that Steele developed in the late 1980s—namely, that minority students get lower test scores not because they're genetically inferior to white students, but because they have to deal with the "weight" of stereotype threats and other negative influences. But these influences can be mitigated—if not eliminated altogether—with the help of special intervention programs that emphasize positive values and self-affirmation. (However, Steele doesn't go into great detail about this program.)*

Walton and Spencer's findings suggested that even a modest stereotype intervention could exert a major impact on a student's grades—further suggesting that stereotyping exerts an equally major negative influence. While it was too soon to conclude that stereotyping was responsible for all, or even most, of minorities' academic underperformance, the two psychologists had found evidence suggesting that the influence of stereotyping on performance was greater than almost anyone had supposed.

*Notice that, throughout this a chapter (and, really, the whole book), Steele has been focusing on underperformance in an academic setting. Steele doesn't discuss whether it's possible to eliminate stereotype threats in society more generally—if so, it would be much more difficult, since it's harder to control people's environment and neutralize the influence of stereotype cues.*

There's still a lot of stereotyping research left to be done, Steele concludes, but what research *has* been done suggests that people can reduce the effects of stereotyping—not just by improving education for everyone, but by reducing identity cues for minorities.

*Steele concludes by reiterating his conclusions about the importance of reducing identity cues. More research is needed, but Steele's work so far has gone a long way toward offering some potential solutions and, perhaps more importantly, burying the bigoted hypothesis that minorities underperform because of genetic factors.*

## CHAPTER 10

The author Sheryll Cashin has a private joke with her husband. Both Sheryll and her husband are black, and on Southwest airplanes (which allow people to choose seats on a first come, first served basis), they notice that black passengers tend to have open seats next to them, even when they're the best seats—so Sheryll and her husband hope that a black man will sit in a good row and then "save" it for them with his very presence. What, Steele asks, causes the evidence of racial prejudice that Cashin points out? Are the passengers conscious of their own racism? Or is there something subtler going on?

*It's interesting that the chapter opens with a non-academic example of stereotyping (and it would seem, racism). This is a sign that Steele will generalize his findings, applying stereotype theory to settings beyond the confines of the classroom.*

Assuming the "identity threat explanation," one might conclude that the white passengers on Southwest flights aren't actively racist. Rather, they're afraid of saying or doing something racist during the time they spend with a black person—much like Ted McDougal in his predominately black college class. Ironically, this makes the white passengers more likely to do something that *is* perceived as racist—namely, not sitting next to black passengers.

*Here again, Steele doesn't suggest that white Southwest passengers are guilty of explicitly racist thoughts. Rather he suggests that, in their eagerness to avoid* seeming *racist—saying something offensive while sitting next to a black passenger—white passengers actually end up* doing *something racist: purposefully avoiding sitting next to black passengers. Of course, it could also be argued that there's more conscious racism on a flight than Steele chooses to discuss.*

With his graduate student Philip Goff, Steele conducted research into the structure of contemporary American society. Goff and Steele wanted to study the factors that cause different kinds of Americans to be "driven apart." The writer David Brooks has written about the *de facto* segregation of American society: in contemporary times, Americans have increasingly been divided into smaller and smaller enclaves, based not only on race but also on class, education, and political affiliation.

*Some of the most important sociological research of the last few decades concerns the self-segregation of American society. Contemporary Americans tend to associate with people with similar education and interests—and largely by choice.*

It's impossible to deny that Americans are still segregated—sometimes voluntarily, sometimes not—by race. Twenty years after the *Brown v. Board of Education* Supreme Court decision, desegregation in schools was still being hotly debated, and the Supreme Court made other decisions that made desegregation slow and effectively impossible in many cities. In 2000, American schools and neighbors were more racially segregated than they were in the mid-1980s.

*In the year 2000, segregation is illegal in schools. However, America still often seems like a* de facto *segregated society. For example, even if black students are allowed to attend a predominately white school, located in a predominately white neighborhood, black families may be more likely to send their children to a school where most of the students are black, to keep their children from feeling alienated or discriminated against.*

It could be argued that group segregation in America isn't a serious problem. If one assumes that Americans are "independent actors" who can make their own choices in life, then the increasing segregation of American society is just proof that people prefer to be around other people who are like them. But if one assumes, as many social scientists do, that people benefit from knowing many different kinds of people, then group segregation is a serious problem. Not all groups are equal—some groups have more power and access than others. Therefore, if America is segregated by race, income, or education, then certain groups will continue to enjoy a greater amount of power and access, and continue sharing their opportunities for success only with other people in their network.

*Perhaps the reason that* de facto *segregation isn't seen as a serious problem in the way that legal segregation was in the 1950s is that we want to assume that people are responsible for making conscious, autonomous choices. Steele's point, however, is that these segregated groups are not equal, even if they are partly chosen. Groups with more money and influence tend to keep that money and influence within their group, while groups without it will be less likely to access it.*

The sociologist Glenn Loury came to a counterintuitive conclusion about group segregation in America. He suggested that networks of friends and colleagues are the primary cause of racial inequality in America, rather than direct discrimination against blacks. For example, a white applicant may be more likely to get a job than a black applicant—however, this may be because the white applicant has an influential friend who's recommended him for the position, while the black applicant doesn't.

*Loury's findings both support and complicate the idea that black job applicants are often the victims of prejudice. Black job applicants may lack a helpful, influential job network, due to structural or historical prejudices against black people. However, Loury suggests that many black job applicants also aren't necessarily the victims of direct, conscious racism. According to Loury's findings, it's possible for qualified black applicants to be denied jobs consistently, without their interviewers being racist in any conscious way—it's more a matter of belonging to the "wrong" social network.*

As Goff and Steele researched group segregation, they developed an experiment that could measure the impact of "identity threats on association preference." In the experiment, white male Stanford students were brought to a lab, supposedly for a study of social communication. The students were asked to speak with two students, both black. Half of the students were instructed to talk about racial profiling; the other half were instructed to talk about love and relationships. Each student was asked—seemingly as an afterthought—to arrange the three chairs in which he and his two conversation partners would be sitting.

*Goff and Steele's experiment is designed to measure the relationship between racially-charged conversation topics and measurable, quantitative behavior (in this case, arranging chairs in a room).*

The results of the experiment suggested that the way the students grouped the three chairs varied with the topic of the conversation. When the topic was racial profiling, the students tended to put the two black participants' chairs close together, and then sit far away. But if the topic was love and relationships—a less racially charged topic—the students chose to group the three chairs close together.

*The experiment suggests that white people feel uncomfortable talking about racial profiling with black people—or at least are made to feel more of a divide between themselves and black people than they might feel in discussing other topics.*

To get a better sense for the dynamics of racial discrimination, Steele and Goff included two other groups of white Stanford students in the study. Half of the students spoke to two white conversationalists. The students who spoke to white partners put the chairs close together regardless of conversation topic. Finally, Steele and Goff asked participants to complete a list of word fragments—for example, they were asked to complete the fragment, "rac--t" (which could be "racist" or "racket"). Participants who spoke to black partners about racial profiling tended to complete the fragments with words associated with stereotyping. In all, the experiment suggested that white participants were implicitly worried about being seen as prejudiced.

*In order to get a sense for what the experiment subjects are thinking before and after the experiment, Steele and Goff ask the subjects to fill out word fragments (although this also seems like a very subjective measurement of one's thought process). This task is designed to measure the extent to which the subjects are thinking about race-related concepts. In all, the study suggests that white subjects change their behavior because of the fear of being perceived as prejudiced, rather than because of actual, overt prejudice. However, one could argue that white Stanford students aren't a very representative sample of the way most white Americans talk or think about race.*

Goff and Steele conducted a similar experiment to rule out whether or not simple racism was the cause of this. The only difference between this experiment and its predecessor was that this time, participants were asked to complete two tests on prejudice a day before the experiment. The "implicit racism" test, developed by Harvard social psychologists, was designed to measure the speed of association between images of black people and negative things. Participants who associated images of black people with bad things most quickly (and, thus, could be considered the most prejudiced people) didn't sit farther away from black conversationalists than any other participants. This suggests that prejudice didn't have much impact on distancing—the fear of being *seen* as racist was the deciding factor.

*In the second version of the experiment, Goff and Steele obtain evidence suggesting that there's no correlation between hostility to black people (as measured by the Harvard test) and behavior around the black conversation partners involved in the experiment. Again, however, one might question what, if anything, these findings suggest about the American public in general—after all, it seems reasonable to assume that racist white people also alter their behavior around black people.*

The desire to avoid stereotypes is a powerful motivator for Americans. On a Southwest flight, white passengers might want to avoid confirming the stereotype that they're racially prejudiced, and don't know how to interact with black people without being offensive—or just don't want the "hassle" of trying to do so. Like many Americans, the passengers simply avoid associating with people who are different from them—which, ironically, could be interpreted as prejudiced behavior.

*Steele broadens the scope of his research in this chapter, applying his examinations of Stanford students' behavior to public settings, such as airplanes. However, it's not clear if what's true for predominately liberal, highly educated Stanford students is also true for white Southwest passengers—in other words, it's not clear if the desire to avoid seeming prejudiced is a more powerful motivator than actually being prejudiced.*

Goff and Steele collaborated with Paul Davies (whom Steele introduced earlier in the book) to develop another experiment. This experiment was almost identical to Goff and Steele's previous experiment. But this time, when the researchers gave the white Stanford students their instructions, they told half of the students that talking about racial profiling with black students could be uncomfortable, and that the students should treat the conversation as a learning experience. With these instructions, the white participants moved their chairs closer to their black conversation partners. Furthermore, when they took a word fragment test, they no longer completed so many fragments with race-related words. Interestingly, Steele notes, it was only this kind of instruction that made the white students more comfortable. It didn't work when the researchers assured the students they wouldn't be judged for what they said, or that their perspectives were valid.

*The experiment suggests that, at least among white Stanford students, it's possible to relax stereotype threats by assuring the students that talking about race is uncomfortable for almost anyone, and it can be made easier when it's treated as a learning task among equals. While these findings may be very useful in improving practices on college campuses, Steele leaves it an open question how one would use his findings to reduce prejudicial behavior in American society overall.*

Steele's findings are encouraging. Identity threats may keep people apart, but there are simple ways to minimize their impact. More broadly, people need to begin to recognize that, while they're autonomous individuals, their behaviors are more tied to social identity, and the fear of doing or saying the wrong thing, than they probably realize. And finally, he reiterates his main point: "Stereotype threat is a broad fact of life."

*Steele has spent the bulk of his professional career monitoring the behavior of students at some of the country's most elite universities. How this research could be applied to American society in general is left unclear, but Steele will offer some further thoughts on this matter in the next and final chapter.*

## CHAPTER 11

Since the election of Barack Obama in 2008, there's been a lot of talk about America becoming a "post-racial" society. In *Whistling Vivaldi*, Steele has tried to advance a more nuanced argument. Even if Americans abandon all racial prejudices overnight, they'd still have to deal with identity contingencies—the fear of being perceived as racist, and the fear of confirming other people's prejudices. The unfortunate reality is that identity threats continue to influence people's behavior, whether they're aware of it or not.

*The election of a black president was celebrated by some as a sign that "racism is dead" in America. However, the events of Obama's presidency, including police brutality against black people and the circulation of the myth that Obama wasn't born in the United States, suggest that this simply isn't true. But instead of talking about these overt, hostile displays of bigotry, Steele instead discusses examples of people altering their behavior to avoid seeming racist, or to avoid confirming a stereotype.*

Perhaps the most important thing Steele has discovered during the course of his career is that even the threat of being negatively stereotyped can change a person's behavior in important ways—even behaviors such as track competitions, or taking a math test, that seem to have nothing to do with race or gender. People who formulate policy need to understand that it's not enough to eliminate prejudice itself—people also need to feel safe from the risk of "identity predicaments," or there will continue to be an achievement gap.

In all, Steele hopes that *Whistling Vivaldi* can be an optimistic book. He's detailed a variety of techniques, including critical feedback, narrative formation, and fostering intergroup conversation, that contribute to the weakening of identity threats, and seem to lead to greater success for minorities.

The irony is that, even though Obama's election was widely hailed as a sign of the advent of post-racial America, Obama spoke about his race often (Steele says), and celebrated his heritage. Obama talked about his white mother and his black father, and about how he has family members "of every race and every hue." By speaking about his own racial experience, Obama inspired many people—including millions of people who *didn't* share his racial makeup. Obama also signaled that race isn't an "unalterable essence." Rather, race—and identity in general—is fluid, and it's "activated by [its] situational relevance." Identity shouldn't be ignored or suppressed—rather, people should celebrate their identities and use them to understand other people's identities. Steele hopes that *Whistling Vivaldi* can impart a similarly hopeful, optimistic message about the future of identity in America.

*As long as policymakers neglect Steele's research, Steele suggests, there will continue to be an achievement gap. This is because, even if standardized tests are supposed to be unbiased, and even if people of all identities are equally successful and ambitious, people of certain identities will continue to suffer from stereotype threats that affect their performance.*

*Steele admits that there's much more research to be done about how to implement changes that can reduce stereotype anxiety. However, he's described some tentative solutions to the problem, which future researchers and policymakers should explore in more depth.*

*Steele began his book by discussing the segregation of Chicago in the 1950s. He ends the book by discussing the rise of a brilliant, black, Chicago-based politician—Barack Obama. In this way, Steele seems to be taking an optimistic view of recent American history. Many of the racial obstacles that Steele had to deal with as a child are now nonexistent. However, this doesn't mean that black people don't have to deal with stereotyping, or the threat of stereotyping, anymore. Steele concludes by making a point that he's suggested throughout the book: Americans shouldn't try to hide their identities. Rather, they should celebrate their identities, while also understanding that identity, and society's awareness and perception of identity, plays a huge role in dictating behavior.*

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